OE FORM 6000, 2/69

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION

ERIC REPORT RESUME

ERIC ACC. NO. ED 056 257					
CH ACC. NO. AA 000 748	P.A.	PUBL. DATE Oct71	ISSUE RIEMAR72	IS DOCUMENT COPYRIGHTED? YES ☐ NO ☒ ERIC REPRODUCTION RELEASE? YES ☐ NO ☒ LEVEL OF AVAILABILITY I ☒ II ☐ III ☐	

AUTHOR
Havelock, Ronald G.; Havelock, Mary C.

TITLE
Preparing Knowledge Linking Change Agents in Education: A Materials and Training Development Project. Final Report.

SOURCE CODE	INSTITUTION (SOURCE)
MVK50925	Michigan Univ., Ann Arbor. Inst. for Social Research

SP. AG. CODE	SPONSORING AGENCY
BBB03611	National Center for Educational Communication (DHEW/OE), Washington, D. C.

EDRS PRICE	CONTRACT NO.	GRANT NO.
0.65;3.29	OEC-0-8-080603-4535(010)	

REPORT NO.	BUREAU NO.
	BR-8-0603

AVAILABILITY

JOURNAL CITATION

DESCRIPTIVE NOTE
90p.

DESCRIPTORS
*Change Agents; *Guides; *Training Techniques; Program Development; *Conferences; *Summative Evaluation; Manuals; Participant Involvement; Questionnaires; Bibliographies

IDENTIFIERS
Knowledge Linkers

ABSTRACT
This project was designed to meet the following two objectives: (1) to produce a manual for educational knowledge linking change agents, and (2) to develop plans and designs for the training of educational knowledge linking change agents. This final report of the project consists of three sections, as follows: Section I. History of the Project--Background and Rationale; How the Guide Was Created: Cycles of Development; and The Evolution of Change Agent Training Strategies and a Manual for Change Agent Training Design; Section II. Evaluation of the "Guide" (Prototype #2) by 115 Change Agents--The Reviewers; Responses to the Review Form (Appendix A: Letter of Invitation to Potential Reviewers of the "Guide" [Prototype #2]; Appendix B: Form for Background Information on Reviewers; Appendix C: Reviewer Questionnaire and Cover Letter); and Section III. Evaluation of CECAT Based on Post-Conference Reactions of Participants--Background Readings; Printed Conference Materials; Conference Activities; Post-Conference Action Possibilities; and Future Need of Conference Related Materials; and Appendix A: CECAT (Conference on Educational Change Agent Training) Evaluation Form. A bibliography is provided. (For related documents, see ED 056 256, 258, and 259.) (DB)

FINAL REPORT
Contract No. OEC-0-8-080603-4535(010)

PREPARING KNOWLEDGE LINKING CHANGE AGENTS IN EDUCATION:

A materials and training development project.

by

Ronald G. Havelock

with the assistance of
Mary C. Havelock

Center for Research on Utilization of Scientific Knowledge
Institute for Social Research
University of Michigan
Ann Arbor, Michigan

October, 1971

The research reported herein was performed pursuant to a Contract No. OEC-0-8-080603-4535(010) with the Office of Education, U.S. Department of Health, Education, and Welfare under the title "Diffusion of Utilization Research to Knowledge Linkers in Education." Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. Department of
Health, Education, and Welfare

Office of Education
National Center for Educational Communication

TABLE OF CONTENTS

OBJECTIVES

This project including amendments and extensions was designed to meet the following two summary objectives:

A. <u>To Produce a Manual for Educational Knowledge Linking Change Agents</u>

1. To prepare a useful reference manual on the dissemination and utilization process for the practicing knowledge linker in education, building on the literature review on dissemination and utilization entitled PLANNING FOR INNOVATION, ED #029171.

2. To compare alternative contents and formats for such a field manual on the criterion of perceived usefulness by linkers.

3. To make a full revision of the manual based on reviews by 100 representative linkers, this revision to include special introductory statements for administrators and other typical users and an extended presentation on the role of change agent.

4. To prepare checklist summaries of major components of the manual for future use as a workbook or as field instruments.

B. <u>To Develop Plans and Designs for the Training of Educational Knowledge Linking Change Agents</u>

1. To create an awareness and involvement in the problem of change agent training by relevant segments of the educational community.

2. To prepare alternative training designs for such change agents, specifying:

   a. identification and recruitment of appropriate individuals for training,

   b. training workshop design (materials, structure, staffing, funding),

   c. support materials for continuing use by trained agents (manuals, instruments, readings, etc.),

   d. follow-up consultation and evaluation activities and personnel required to staff a total on-going program.

Most of the resources of the project were assigned to these two major tasks (A and B), but the project also called for some support of further refinement of utilization theory along the lines of the "linkage model" proposed by Havelock in his previous report: PLANNING FOR INNOVATION.

ACHIEVEMENT OF OBJECTIVES

A. The Manual

A manual of over 200 pages has been produced according to the process specified in the proposal. An early draft version (prototype #1) was evaluated intensively by a small group of representative change agents. As a result of this collaboration a second working draft (prototype #2) was produced including case studies from these change agents. Prototype #2 was reviewed intensively and evaluated by 115 educators chosen systematically to represent perotypical future users of the manual. The response was overwhelmingly favorable and in addition provided a quantity of information which could be used for developing a third revision (prototype #3).

Subsequently the manual, under the title "A Guide to Innovation in Education" has been distributed by The Institute for Social Research on a limited basis under a developmental copyright from USOE so that it could be sold at cost and used in a number of university courses, in-service workshops, and conferences. The feedback from this controlled dissemination has indicated that the "Guide' can be an important tool in training and in program management in a variety of educational practice settings.

The "Guide' has now been further revised in accordance with objective A-3 to include a brief introduction for administrators and a greatly expanded section explaining the concept of "resource linker" and two other alternative change agent concepts, the "catalyst" and the "solution giver." Additional sections are now being written and all three appendices revised and up-dated using non-federal funds in preparation for final publication. Negotiations are under way with Educational Technology Publications, Inc. which has expressed a desire to publish the final version.

Checklists have been prepared for key portions of the text in accordance with objective A-4. However these instruments have not yet been field tested so that their utility is still a matter of conjecture. It is anticipated that before such materials can be used as reliable tools of change planning, they will require several cycles of development parallel to that of the "Guide."

B. Training Designs

On May 25 to 27, 1970, 51 nationally recognized leaders in the field of change agent training were brought together at Clinton, Michigan to discuss the critical issues relevant to the content and procedures for such training. The conference, itself, was an intensive learning experience for those involved and represented a major dissemination thrust for the "Guide" and for the need for new resource linking change agent roles. However, the conference also produced a number of specific, through tentative, training designs for different conceptions of the role. These are incorporated as Part V of the manual described below

The primary products relevant to the achievement of objective B-2 have been assembled in the form of a manual for training program developers. This manual includes sections on knowledge content to be trained, goals of training, principles of training, an eight-part systematic framework for designing comprehensive programs, and several presentations of alternative training models

proposed by self-selected subgroups at the Michigan conference. Finally, the manual includes a fully developed outline for training state agency change agents. Plans for publication and distribution of this manual on training have not been fully formulated but it is expected that further revisions will be made using non-federal funds and that the Institute for Social Research publications office will make the document widely available.

CONTENTS OF THIS REPORT

This final report consists of three sections and four attachments as follows:

Section I *Narrative History of the Project* including development cycles of the "Guide," design, conduct, and outcomes of the Michigan Conference on Educational Change Agent Training (CECAT) and subsequent dissemination and training activities.

Section II *Evaluation of the Guide (Prototype #2) by 115 change agents:* a summary report based on returned data.

Section III *Evaluation of CECAT* based on post-conference reactions of participants.

Attachment #1 A Guide to Innovation in Education (Prototype #3) plus revised and expanded introductory section.

Attachment #2 Checklists on Change Process intended to accompany the "Guide."

Attachment #3 A Preliminary Version of a Manual on Educational Change Agent Training.

Attachment #4 "Anatomy of a Communication Arc": a sample of work partially supported under this contract to spell out theory of utilization in more precise terms. This work is still in progress.

Section I: HISTORY OF THE PROJECT

A. Background and Rationale*

The 1960's saw the emergence of a new awareness that research by itself does not provide direct answers to the problems faced in the practical world, and this awareness has been articulated in the formation of a new discipline focussed on the problem of knowledge dissemination and utilization. Research studies of the dissemination-utilization process were virtually non-existent prior to World War II and were restricted largely to the area of agricultural innovations until a decade ago. Increasingly in recent years, however, there has been evidenced a dramatic growth of interest in this topic in such fields as public health, mental health, medicine, international development, and in particular education.

Together with this growing interest in dissemination and utilization as a research concern have come increasing efforts to establish dissemination networks, new roles, and institutions designed specifically to speed the flow of knowledge from research to practice. U.S. education has been in the forefront of this innovative trend. Starting with major federal legislation on education in the early 1960's, there has been a very rapid growth of research and development centers, information clearinghouses, regional laboratories and locally based and regionally based dissemination projects, conferences, and training programs, all geared generally to the same end of up-grading education by infusing in the practicing school system new ideas and innovations based on research knowledge.

This proliferation of institutional forms has been so rapid that in nearly all cases it has preceded the development of adequate role definitions and adequate training and support activities and materials for these new roles. Practically overnight, thousands of *new knowledge linking roles* (disseminators, consultants, demonstrators, etc) have been created and filled by people who have only a vague conception of what the role is and no real way of preparing themselves and supplying themselves with the appropriate knowledge and materials for occupying the role.

Major contributions toward defining and publicizing the need for the linker role in education were made by Clark and Hopkins (1966 a & b) when they developed a taxonomy of linkage roles as a part of their study of "Roles for Research, Development and Diffusion Personnel in Education." They saw specialized diffusion roles as an essential accompaniment to the roles related to research and development in education and further study convinced them that the demand for persons to fill these roles would be tremendous in the not-so-distant future.

The institutionalization of linking roles in education is urgently needed to satisfy this growing demand and to assist in coordinating linking functions so that role overload and marginality, current major causes of linking failure, do not become totally nullifying forces in knowledge diffusion in education. The primary considerations for establishing and training personnel in linking roles are outlined by Havelock, et al (1969, Chapter 7).

*Much of this material is adapted from the original proposal statement.

To provide adequate support for these emerging linking roles in education, the educational establishment will have to provide training courses and field handbooks and manuals not only in specific content areas such as reading, guidance, administration, and curriculum but also in the general processes of disseminating and installing innovations, planning of change, and facilitating the flow of knowledge from research to practice. This project was intended as one contribution to this difficult but essential process. Building on an extensive review of the dissemination and utilization literature (Havelock, et al, 1969), we set out to create a field manual for the practicing knowledge linker in education. It was felt, however, that such a document would be successful only if it were developed collaboratively with a representative sample of these linking agents. Later phases of the project would be concerned with further revision and extension of the field manual and the establishment of training programs to familiarize linkers with its contents and potential uses. It was felt that through such programs some strong new role images would come into being through educators who were beginning to develop an identity and a defined area of expertise as resource linkers.

B. How the Guide was Created: Cycles of Development

1. *Review of Past Efforts and Development of a Proposal*

This project began with a need expressed by the Office of Education for a companion work to the extensive compendium and analysis of findings on dissemination and utilization (Havelock, et al, 1969). While this work was still in progress it was already obvious that its primary audiences would be researchers and policy planners who had the sophistication, patience, and motivation to derive their own implications. What about the busy administrator or practitioner who needed practical help on knowledge retrieval and utilization? Was it not possible to develop some practical guide for this broader and less research-oriented audience so that the substantial existing research and theory in this area could be put to more immediate practical use?

A first step was to look for models of such an effort. Had anyone tried to do this before and how well had they succeeded? In 1958, Lippitt, Watson, and Westley had published a volume entitled The Dynamics of Planned Change. This book was well written, summarized a good deal of existing research, and was directed broadly at practitioners of change. However, it was still largely theoretical-analytical in approach; it did not draw specific implications for specific situations; it contained few clearly specified "do's" and "don'ts"; it was in no sense a "how to" manual. Furthermore, The Dynamics of Planned Change was not systematically evaluated by any group of change agents for its utility or effectiveness before final dissemination. A more recent effort by Thomas E. Woods, The Administration of Educational Innovation (1967) does a fine and concise job of summarizing the rich literature on the diffusion of innovations (touched only lightly by Lippitt, et al) providing it in pamphlet size in the language that a busy practitioner might understand and absorb. But Woods' effort likewise was not tried out and evaluated on a practitioner audience and probably does not have enough depth to be considered a manual on change.

In searching for projects which tried to develop information products according to a systematic evaluation and development plan we came across a study of the comparative effectiveness of several kinds of communication media, done in the field of vocational rehabilitation (Glaser, 1967). A single message about an effective innovation was transmitted by different media to several matched audiences and their adoptive behavior was compared. Glaser found that the written communication alone was sufficient for diffusing knowledge of the innovation, but that the addition of a demonstration conference or consulting activities significantly increased its actual adoption. The key variable here was the opportunity for the receiver to give feedback to the sender about his evaluation of the new idea in terms of his own experience. These results suggested that various mechanisms, conferences, interviews, evaluation forms, and consultations might be needed (a) to develop a product that was meaningful and useful to the intended audience, and (b) to diffuse the product once it was developed.

Although the use of a training package for disseminating experimentally-based or innovative programs to practitioners is common, as are studies of their effectiveness, their diffusion potential is limited because these programs have generally dealt with specific innovations, have been developed in response to requests from specific audiences, and have been designed to solve the unique problems of their respective situations. Such was the purpose of the social science curriculum development studies of Lippitt and Fox (1964). The same limitations apply in lesser degree to Richland's "traveling seminar" (1965) for educational innovation diffusion. Although such programs and packages are invariably reported as "successful," each faced anew the problems of entry, resistance, and linkage training with its respective audiences. Moreover, even having solved these problems for themselves, they do not contribute very much to our *general* knowledge on linkage problems in education. Their techniques for dealing with these problems are not readily generalizable to other audiences or to the same audience under different conditions because the techniques of entry, linkage training, etc. have not been clearly differentiated from the innovation itself.

Also, as these examples illustrate, much of the existing research had as its primary audience that group of practitioners who are most directly involved with the consumer (student, patient, etc.). These people are rarely in a position to assume the role of knowledge linkers to other practitioners. They may or may not have the administrative authority to act as a linker or change agent in their system, but if they are directly involved with the consumer they will have little time or energy to devote to linking activities after coping with the more salient--and urgent--daily problems in their own consumer system.

One attempt to overcome these limitations and to establish linking functions and roles as a permanent aspect of a school system was reported by Shaevitz and Barr (1968) in A Training Program for Research Utilizers: Philosophy, Goals and Methods. Their simultaneous "microaction" and "macroaction" research directed training in change processes at classroom teachers and principals and at people who had cross-building responsibilities within the school system. However, a lack of user

sophistication and an unfortunate lack of involvement on the part of the participants motivated the research team to turn from general issues of change processes to the solution, through change, of specific existing problems in the system. Thus, the future linkage potential of these two groups remains unexamined.

Another important contribution to our early planning for this project was the work of the Communication Program of the Far West Laboratory for Educational Research and Development directed by Dr. Paul Hood. We were especially impressed by the systematic development and evaluation process employed by that program in the evolution of educational products, and we made a conscious effort to adapt their approach in our own planning.

On the whole, past research seemed to say exceedingly little about the effectiveness of specialized communications of the type envisaged in this project. On the other hand, there was some reason to believe from numerous studies and observations of knowledge linking roles in various other fields that the development of viable knowledge-linking roles in education would be significantly aided by the simultaneous development of training programs, handy reference tools, and other software supports at least on a par with those now possessed by the county extension agent in agriculture. They also suggested the need for a development strategy which included features such as:

(1) participation by the audience in product planning,
(2) systematic evaluation, and
(3) planned diffusion including user training and follow-up.

With these ideas in mind the Michigan team developed a proposal to USOE for a manual incorporating features (1) and (2) with the expectation that feature (3) would be added at a later date if the early work was successful.

2. *Literature Review and Annotated Bibliography*

After funding, the project staff began by making a thorough search for major works on change in education, updating the search effort of two years earlier which had led to the comprehensive literature review. This time, however, we were especially on the look-out for literature on change which was practitioner-oriented and in which derivations of implications for practice were spelled out.

From this literature review the staff* developed the first product of the project, an annotated bibliography of "Major Works on Change in Education" with a detailed subject index. The subject index was later valuable as a key to specific points and quotations which we wanted to include in the "Guide." It was also anticipated that this bibliography

*Havelock laid out the overall plan and took part in editing and screening while the annotations and indices were developed by Huber and Zimmerman.

would be a useful appendix for the "Guide," itself, and for that reason we used the following criteria for choosing works to be cited:

(1) General coverage of a range of topics relevant to educational change.
(2) In book form.
(3) Published and available in education libraries, book stores, or by ordering from indicated sources.

For the most part we excluded empirical studies and reports on specific research projects unless they covered a range of relevant topics, offered both research findings and implications for practice, and could be obtained as separate monographs.

Copies of the bibliography were printed and distributed both by the University of Michigan's Institute for Social Research and by the Northwest Regional Educational Laboratory.* Included was a sheet entitled "feedback to authors" which asked readers to voluntarily indicate how they had used the bibliography and how useful it had been. Although this device induced only a trickle of responses (they are still coming in) there seemed to be a generally favorable response.

3. *Choosing a Structure for the "Guide"*

There were several alternatives available to us in structuring the "Guide," and because of the potential importance for later utility and acceptance by practitioners, we were anxious to explore a number of them before arriving at any conclusions. At least six possibilities presented themselves:

(1) An encyclopaedic compendium of facts about change process, written in a simple style with practical implications, spelled out and arranged as alphabetical entries of any length from a short paragraph to 2 or 3 pages, thoroughly cross indexed.

Pros: relatively easy and straight forward to create, a good reference for specific user needs, maximum user selectivity allowed.

Cons: expensive to produce if done well (it would be very large), hard to disseminate, very low user involvement (impossible to read cover-to-cover), difficult to use in a training program or in a course.

*In neither case were federal funds from this project used for dissemination.

(2) A systems analytic framework such as Stufflebeam's "Context-Input-Process-Product" (1970).

Pros: would allow a systematic coverage of most topics in a logical orde . This would make the book most useful to policy and program planners especially if they had engineering backgrounds. Increasing numbers of educators are becoming familiar with this approach to conceptualizing and ordering the facts about complex topics.

Cons: may not do justice to some of the social and psychological realities which the change agent must contend with. Moreover it is still foreign territory to many educators and enemy territory to some.

(3) A communication model approach (i.e., "Who says or does what to whom by what channel to what effect.") such as used by Hovland (1954), Rogers (1962) and Havelock (1969) in his comprehensive literature review.

Pros: also allows systematic and comprehensive coverage including the human and social variables. Furthermore since the prime sources are already organized this way the task of retrieval would be greatly simplified.

Cons: has tended to be a researcher's or theorist model rather than a practitioner's.

(4) A casebook with annotations for each case referencing the research literature.

Pros: this would involve the reader and would be especially helpful to those who find themselves in similar situations to one or more of the cases. It would also be an extremely helpful adjunct to training.

Cons: it would be very difficult to teach much substance of the research or theory of change in this manner and it would be very difficult to compose in the first place. There is also a paucity of good, clearly written case materials showing a range of the "do's" and "don'ts" of innovation management.

(5) An anthology of the best writings available.

Pros: it would be relatively easy to construct such a document. The bibliography previously described lists several such works and a selection of the choicest pieces from each would be a simple matter. We could also guarantee that the writing would be first class, the coverage broad; and the points of view varied.

Cons: it would be difficult to present a coherent overview or systematic topic coverage. Most of what is written, even if it is very well written, is not practitioner-oriented and does not go far in spelling out the "how to's."

(6) Problem solving stages: this is the approach used by Lippitt, Watson and Westley (1958).

Pros: from our reading of the limited research literature on the change agent, this approach seems closest to the way he organizes his life and work. It allows systematic and logically ordered topic coverage and is especially suited to the "how to" style of presentation. It is also fairly involving and can be presented in parallel with actual case materials. It is also handy as a basis for simulations.

Cons: there is little agreement among experts on either the numbering or the ordering of such "stages"; moreover it may be more difficult in this approach to pick up the change agent "where he's at." This framework might be seen by some as too rigid and arbitrary to apply to the myriad of situations the change agent might find himself in.

After some discussions with other CRUSK staff experienced as change agents and change agent trainers (e.g., Ronald Lippitt, Robert Fox, Mark Chesler, and Lucille Schaible) and some intensive field interviews with educational change agents in Michigan (in the state department, at the University, and in three school districts), two facts became evident: (a) that the problem solver and the casebook approaches were both the most user-oriented and (b) that it is very difficult to elicit meaningful reactions to the idea of a product when the reactors don't have a model of the "real thing" in front of them.

Weighing these alternatives and facts, we chose the problem solver stages approach as our primary structure for developing a first prototype with the added notion that various appendices (such as the annotated bibliography) and a subject index could enhance its value as a reference work, and that a series of case studies would increase and enhance its value as a readable and involving book.

4. *Exploratory Field Interviews*

The exploratory field interviews were especially important in giving us a picture of the "life space" of the people who are now operating as educational change agents. It was obvious that most of these people are not theorists or even grand strategists, that what they know about the change process is not very systematically organized and only loosely articulated, that they think in terms of specific projects on which they are working, and that their thinking runs in a kind of a chronological order as they talk about their work. It was evident that if we were

to be truly collaborative we would first have to give these change agents a chance to tell their war stories in gory detail and we would have to listen carefully to show them how their experiences and the research on the change process matched up.

Originally a conference had been planned to attract twenty or more educators representing change agents in at least four categories:

(a) State Department of Education personnel who are engaged in disseminating new knowledge to school systems.

(b) Directors of knowledge utilization and demonstration projects under Title III of the Elementary and Secondary Education Act.

(c) Dissemination staff members from the Regional Educational Laboratories.

(d) Professors in schools of education.

However because of our budget constraints and the increasingly evident need to work in depth with those who we contacted, we decided to limit the first conference to five articulate and representative change agents who would be willing and able to (a) read our materials critically and thoroughly, and (b) provide us with descriptions of their work which could be developed into cases for inclusion in the "Guide."

5. *The Knowledge Linkers Workshop*

During the fall of 1968 and the early winter of 1969, the project staff worked to develop a first prototype of the "Guide" based on the problem solving structure in preparation for the first evaluation by the change agents and a representative of the USOE (Mr. Richard Elmendorf). By February 15, each participant was mailed a rudimentary draft version including drafts of the introduction, Chapter I "Establishing the Knowledge Linker Role," Chapter 2 "Diagnosing the Problem in the Client System," Chapter 3 on "Retrieving Relevant Knowledge," an appendix to Chapter 3 on available information resources, Chapter 4 "Selecting the Innovatior," and the annotated bibliography.

The conference was convened on March 15, 1969. By prior arrangement each participant began by relating a case of attempted innovation from his work experience. The case could be either successful or unsuccessful but in either case it should be the one he knew most about and the one that seemed to him to illustrate the most about the change process. After each presentation the project staff would question the presenter and suggest how his narrative could be fitted to a problem solving stages model of change.

Part of the afternoon session was reserved for comments and reactions to the drafts of "Prototype #1." The introduction and the overall plan for the "Guide" were received favorably as were the two appendices, but all the participants found the writing style difficult and the layout of chapters cumbersome and rather overwhelming in detail. It was clear that

a more polished product was needed in a simplified writing style with a reduction of diagrams and "telegrams" and an increase in narrative prose and quotations.

On the whole, the conference was very successful even if it contained some bad news for the development team. The case presentations were interesting, rich in detail, and right on target as potential case materials for the "Guide." The feedback on the prototype also provided explicit guidance for further development and support for overall direction.

6. *Creation of Prototype #2*

The first and most important task following the March conference was writing and rewriting of the main context of the "Guide." Havelock assumed primary duties for this part of the project, receiving editorial help and criticism from Douglas Truax and Joyce Kornbluh. The introduction and first chapters were written and rewritten several times until the whole staff felt the proper tone and flow were achieved. Once the style had been set and practiced for a while the writing became much easier.

Parallel to this activity the project staff was developing case studies based on the presentations at the conference. Four of the five presentations were judged to contain enough detail to merit inclusion in the "Guide"* but they required extensive editing and rewriting before they were suitable for publication. Part of this editing process consisted of adding steps that might have or should have taken place but were not stated clearly by the presenter. This fictionalization was minor but was deemed desirable for the sake of readability. However, it may have resulted in distortions such that some cases (e.g., "Mike") sounded more organized and more successful than they actually were while others (e.g., "Steve") sounded less so. There was considerable disagreement among the staff over the wisdom of presenting cases which were not absolutely faithful to reality as spoken by the change agents. However, 115 change agents who later evaluated the "Guide" rated all the cases as "typical" or "very typical" in their experience.**

Considerable time and thought were devoted during this period to providing an interesting and readable format for the main text. In prototype #1 we had provided a text with many headings and an elaborate paragraph numbering system, interspaced at frequent intervals with quotes from other sources. Our conferees felt that this approach chopped up the text and made the flow of thought very hard to follow. On the other hand they enjoyed the quotes which were on target.

The solution seemed to be a two column format with the text flowing down the left column and the right either clear for individual note-taking or providing space for quotes where appropriate. Standard reference footnotes were relegated to the back of the book and the numbering system disappeared entirely. Another change was the addition in the right hand column of references to case study material whenever a point in the text could be illustrated by what did or did not happen in one of the cases.

*The fifth case was the last presented and suffered from time limitations; there was little time left for staff questioning and clarification after the initial presentation.

**See Section II of the report for presentation of this data.

The "Guide" as it was developed during this phase of the project had six components:

(1) The introduction which explained the purpose of the "Guide," suggested three alternative role models for the change agent and a brief analysis of six process stages ("building a relationship," "diagnosis," "retrieving resources," "choosing solutions," "gaining acceptance," and "stabilization and self-renewal."

(2) The four case studies.

(3) The text of six chapters, each representing a "stage."

(4) An alphabetical listing of specific "strategies" of change.

(5) An index of information sources in education (intended as a supplement to stage 3).

(6) The annotated bibliography.

The fourth part (strategies) was derived from a CRUSK working paper by Havelock entitled "Innovations in Education: Strategies and Tactics." This listing was added as a compromise with the encyclopaedic approach mentioned earlier.

As finally assembled, prototype #2, represented a combination of approaches intended to appeal to users with a variety of information acquisition habits. The first three parts could be read in succession; the last three parts could be used for a variety of reference purposes. A reader could also brouse or skim with the aid of charts, a clear outline and headings and many quotes from the leading authors in the field.

We were concerned, of course, that all these elements might represent too much for a manual of this kind but it did provide readers with many alternatives, and with a thorough evaluation planned, we felt that it would be best to let readers decide what should stay and what should go.

7. *Review by a National Cross-Section of Educators in Typical Change Agent Roles*

By the fall of 1969 we felt we had a product worthy of field evaluation. As called for in the proposal, reactions were solicited from four groups of educators thought to be typical of those now operating as "change agents" within the U.S. educational complex. The sample chosen was not intended to be representative of the nation's educational linkers in any strict statistical sense, nor were the four populations from which they were drawn exhaustive of possible linking role positions in the national educational establishment. However, each of the populations chosen had certain distinctive features which made them significant audiences against whose judgment the utility of the

manual should be measured. The significance of each group is specified briefly below:

(1) State Department Personnel:

Every state employs a number of professional educators (ranging from about 10 in the smallest states to about 200 in New York and California) as consultants, coordinators, and disseminators in various specific subject matter areas typically under major divisions identified as "administrative services," "instruction," and "vocational education." Whether or not such professional staff serve as knowledge linkers is not entirely clear. However, such persons are strategically located and formally charged with duties which bring them into frequent contact with practitioners (administrators, teachers, and others) under circumstances where they may be seen as knowledge linkers.

State Department personnel are also significant as a potential audience because of the probable increased reliance upon the states for the administration of federal dissemination programs over the next few years.

(2) ESEA Title III Directors:

This title provides funding for locally originated projects to diffuse innovations and facilitate the innovative process at the school system level. With fiscal year, 1966, the federal government started funding 1,000 such projects across the country. Directors of such projects are change agents or administrators of innovation activities more or less by definition. Hence, they represent a large and rapidly growing new audience for knowledge about the utilization process. Study of this audience and its reactions to the manual might give some indication of the relative merits of installing and supporting knowledge linkers on the local school system level in contrast to state, regional or federal loci. An estimated 1,500 individuals belonged to this population at the time the project began.

(3) Regional Educational Laboratory Dissemination Staff:

The REL's were established with the specific mission of development and dissemination of educational innovations. Although they varied greatly in size and emphasis, the 20 REL's then in existence represented an important emerging force in the educational establishment. They were staffed by young, eager and often highly skilled professionals dedicated to educational change. Thus, although the number of individual diffusion personnel (including those involved in demonstration and field consultation activities) was small (approximately 200 individuals at that time) it was proportionally large within the REL's. In addition the REL's deserve close watching as potential loci for a vastly expanded federal effort in which an equivalent

of the present diffusion network in agriculture (the Cooperative Extension Service) would be installed in the field of education.

(4) Professors of Education:

There are an estimated 50,000 professors of education teaching in the 1,500 degree-conferring institutions of higher learning in the United States. Although it is presumed that few from this group would identify themselves as "knowledge linkers" or "change agents," they represent the largest clearly identifiable pool from which such persons are likely to emerge. In selecting a sample from this group for evaluating the manual, we were guided by such additional criteria as: some amount of extension teaching, involvement in consulting activities off-campus, and membership or training experiences with such groups as the National Training Laboratories of NEA.

In accordance with the plan set out in the original proposal prospective respondents were chosen at random from available lists and were sent a letter and a brief form explaining the project, asking for them to spell out their current role and soliciting their consent to be reviewers of the manual in exchange for receiving a complimentary copy of the final product.

The response to the commitment request letter was very encouraging (151 out of 200 or 75.5% accepted). Of these 115 later returned completed review forms (75.6%).

Although the detailed results of this review process are presented in Section II of this report, their import can be summarized briefly. The review process was successful on three counts:

(1) It elicited a high rate of return.

(2) Reactions to the "Guide" as a whole and to all major sections was overwhelmingly positive.

(3) The reviewers provided us with extensive and detailed information for the development of a third and significantly improved version (prototype #3).

8. *Creation of Prototype #3*

With additional support from the U.S. Office of Education we were able to use the feedback from the reviews to formulate another revision of the "Guide" in the winter of 1970. The principal changes made were as follows:

(1) Complete rewrite (for about the tenth time) of the introduction.

(2) Complete recomposition and rewrite of Stage III ("Acquiring Resources").

(3) Introductions and "editorials" on each case study.

(4) Updating the appendix of information sources (the obsolescence rate for this index is extremely high).

(5) Minor changes in the other "stages."

(6) The inclusion of many more references to the case studies in the right hand column of the text.

Each of these revisions was based directly on feedback from reviews.

9. *Dissemination and Utilization of Prototype #3*

This third prototype version was considered sufficiently polished to merit limited distribution and utilization in some training workshops and conferences. Under a developmental copyright, the Institute printed and paper-bound 2,000 copies, recouping printing costs with a $3.00 charge on each copy.*

In addition to individual users, the "Guide" became the basis for several in-service training workshops, conferences, and graduate seminars among which were the following:

(1) The "Guide" formed the basis of a training institute for vocational education information specialists and program administrators held at Pittsburgh, Pennsylvania in May of 1970.** At this event, participants divided into four groups to simulate the development of a change project using each of the six stages.

(2) The "Guide" was one of several background documents supplied to the Michigan conference on Educational Change Agent Training (CECAT, see Part C below for fuller discussion).

---

*No federal funds used for this purpose.

**One of seven institutes supported under a grant from the USOE to a consortium coordinated by North Carolina State University entitled "National In-Service Training Multiple Institutes for Vocational and Related Personnel in Rural Areas." The workshop in question was organized and directed by Dr. Douglas C. Towne of the University of Tennessee, now at the Northwest Regional Educational Laboratory, Portland, Oregon. The other workshops all received materials from the "Guide" (Introduction and Case Studies) but specific training activities were not based on them.

(3) t was a key document in a training program sponsored by the Department of Health, Education, and Welfare, Social and Rehabilitation Service (HEW-SRS) to develop "Research Utilization Specialists" in the rehabilitation field.

(4) n the summer of 1970 the "Guide" was used in conjunction with two pilot programs to train state agency linkage agents (Project SPREAD at Denver, Colorado and the Pilot State Program sponsored by the National Center for Educational Communication (NCEC) at the University of Missouri).

(5) n the winter and spring of 1971 the "Guide" was used as the basis of graduate seminars at Michigan and at the University of Sussex in England. In these seminars graduate students worked on educational chan projects which were analyzed systematically according o the six stages.

(6) he Special Interest Group on Research Utilization of the American Educational Research Association held a three day workshop at the Educational Testing Service, Princeton, New Jersey in February of 1971 at which the "Guide" was one of the basic documents.

(7) n June of 1971, the University of Wisconsin at Milwaukee held a 2 day in-service training workshop at which the "Guide" was the core document. In this seminar, participants clustered into eight groups. Two groups focussed on each of the four case studies, listing what should have and could have been done at each stage.

The above represents only a partial listing of the uses of the "Guide" to date that have come to the attention of the author. They suggest the range of uses of the "Guide" and its potential utility in the future as a field manual on change and as a basis for pre-service and in-service training of resource linkers and change agents in a variety of educational areas, roles, and levels.

10. *Further Revisions and Additions Under USOE Contract*

Although none were funded under this contract, most of the dissemination events listed above were evaluated and provided feedback of potential relevance for redevelopment of the "Guide" at some future date. Most of this feedback was extremely positive suggesting that the core document served its purpose more than adequately. However, there were certain changes and additions that might make it even more powerful and more relevant for a wider audience. Therefore in a contract supplement the USOE provided additional funds for the development of:

(1) Checklist summaries of major points in each chapter.

(2) An introductory section for administrators and at least one other specialized audience.

and (3) A new section on establishing the role of change agent-knowledge linker.

Each of these additions was developed and written in the summer of 1971 and all are included in this report although none have been field tested for effectiveness.

The checklists, which are contained in "Attachment #2" below, still require and deserve considerable revision and evaluation. Ideally they should follow a development cycle parallel to the "Guide" itself.

It was decided that special introductions should be brief and fairly broadly targetted or else they would throw off our original change agent audience. The second introductory statement applies to "inside agents working from below" which we found to be the largest class of users and potential change agents on the educational scene, i.e., students and teachers *who want to change their own school*. These sections are incorporated in the "introduction" to the copy of the "Guide" presented in Attachment #1.

The new piece on the problem of establishing the role of linker has not been incorporated in the "Guide" as such (although the role description section has been expanded and revised). Rather it seemed appropriate to provide this material as part of the manual on training program design (Attachment #3) where it is incorporated as elements of Part IV, especially IV - 1, 2, 3, and 5. Considerations of role definition, development, and installation are thoroughly explored throughout the training design manual and specific alternatives are provided in Parts V and VI.

11. *Production and Publication of a Final Version*

After two and one-half years of development and field evaluation, the "Guide" has been shaped into a potentially powerful tool for educational practice improvement. However, a good deal remains to be done to make it widely disseminable and usable through the remainder of this decade.

The author has immediate plans to revise and expand several parts including the introduction, Stage I, Stage VI and all the appendices. In particular Appendix B has proven extremely vulnerable to obsolescence and must be thoroughly overhauled. All these changes will be made by the author* and they will lead to the publication of the "Guide" in the spring of 1972, probably by Educational Technology Publications, Inc.

*This will be done without the use of federal funds from this contract.

The Evolution of Change Agent Training Strategies and a Manual for Change Agent Training Design

1. *Background: The Need for Something Beyond the Guide*

The original proposal for this project was focussed exclusively on the development of a "Guide" to the process of knowledge utilization (in early draft titled "The Knowledge Linker's Handbook"). The "Guide" was to be targetted to a particular educational audience, those concerned with utilizing knowledge to introduce practice improvements at all levels and in all types of educational situations. However, from the beginning there was a problem in identifying who these people were by title and position. Up to now no one in education has carried the title of "change agent" or "resource linker," "utilization specialist" or "knowledge broker." Yet once the development cycle began and we started identifying individuals, interviewing them, and getting their inputs on the emerging "Guide," it became evident that, while such people do exist, they are (a) in very short supply, (b) know very little of the literature on change, and (c) fly by the seat of their pants in developing change strategies.

The "Guide" would be a help, provided the right people were aware of it, were motivated to read it, and had enough initiative to find ways of using it in their work. These were all big "ifs." Clearly something more substantial and intensive was needed if we were to move toward a really lasting, coherent, and professional concept of resource linker.

As with the development of the "Guide," itself, we decided to move forward in a collaborative and systematic way, this time involving the key national leaders who had had a hand in the training of various types of educational change agents or had a hand in administering organizations and programs in which such individuals would be working (e.g, State education agency staff).

The idea of a training program design as the appropriate next step in our program had roots in other events of the previous two years that are worth noting:

(1) The need for the design of some sort of nation-wide program to diffuse current knowledge on utilization and planned innovation was discussed at length during the review conference of leading utilization scholars in Ann Arbor in February, 1968 (that meeting was sponsored by the Literature Review Project). At that time, Everett Rogers described the experience of the National Project for Agricultural Communications (NPAC) which was launched in the mid-fifties as a program to diffuse current knowledge about communication of innovations to agricultural change agents in all the states. There was consensus among the group that a similar program was needed now in education.

(2) The same idea was proposed again to the Special Interest Group on Research Utilization of AERA at the annual meeting in Los Angeles in February, 1969, and strongly endorsed by most of those present.

(3) Our experience in April, 1969, at the mini-conference of educational change agents to discuss the emerging handbook (see B-5 above) strongly indicated the need for some sort of training workshop as a necessary accompaniment to any written materials. The participants at this meeting were only able to identify themselves with the materials after they had had a chance to discuss the "agent" role concept in the context of their own work and to compare their experiences with others engaged in similar activities.

For these reasons a proposal to extend the project to include a conference to develop training program specifications was submitted and approved by the USOE; subsequently a second supplement was requested expanding on these ideas and calling for more extensive conference follow-up (in addition to "Guide" additions described earlier).

2. *Conference Planning*

As a first step in developing this part of the project a planning and steering committee was formed consisting of:

Ronald G. Havelock, Project Director
Henry M. Brickell of the Institute for Educational Development
Charles C. Jung of the Northwest Regional Educational Laboratory
Thomas C. Clemens of the U.S. Office of Education

This group represented a range of backgrounds and points of view with a common central concern for the training of specialists in resource utilization.

The committee had these concerns: (a) to design an event that would be involving, informative, and productive: i.e., we had to attract the very best people in the field, we had to teach them what we had in mind as "resource linking change agentry," and we had to get them to work together to produce some training designs. (b) to choose a list of potential participants and a procedure for recruiting them.

To speak to the first concern, it appeared that the conference, itself, should be designed to have three phases: (1) input (to familiarize or remind participants of existing state-of-the-art knowledge about change process), (2) discussion (to analyze the problem of training and to derive implications from research literature relevant to change agent training), and (3) output (to work together in teams to put together actual training designs based on (1) and (2)).

To reinforce the input phase it was decided to provide all conferees with advance written materials and to ask for extensive prior reading and thinking on the content represented in these materials. By this means, hopefully, all participants would arrive with some common knowledge in their heads, some shared expectations, and a specific expectation that they could and would contribute to the proceedings.

Choosing and recruiting participants was also a crucial task. We had to have people who (a) represented the highest levels of sophistication and understanding of change processes from a variety of perspectives, (b) had long experience and know-how in the art and science of training, per se, (c) understood the complexities of the educational settings in which trainees would be working, and (d) had the national recognition and respect as leaders and experts to give the conference and its outputs maximum visibility.

To meet these objectives at least seven constituencies had to be represented in some degree:

(1) prominent researchers on educational innovation process,
(2) U.S. Office of Education: research training, planning, dissemination,
(3) state education agency officials,
(4) school of education deans,
(5) superintendents or program directors for school districts or exemplary programs,
(6) private enterprise, publishers, etc.,
(7) Regional Educational Laboratory and R&D Center directors and staff especially concerned with dissemination and change.

Under these seven headings the committee drew up a list of over 150 names. From this list a smaller number (8-10 in each category) were selected as the persons to be reached in the first wave of invitations.

Because of the prominence and expertise of the chosen group, it was decided that further inducement in the form of travel and living costs should be offered. A grant of $2,000 was provided by the Center for Research on the Utilization of Scientific Knowledge from its Kellogg Foundation grant to help defray these additional costs.

3. *Recruitment*

Six key experts were contacted by phone approximately five months before the tentative date set for the conference. Because the participation of these persons was deemed essential, it was felt that their schedule should be checked first and commitments obtained. The fact of their agreement to participate would also be a draw to some of the others we would contact later.

A letter of invitation was composed explaining the nature of the conference, objectives, time, place, etc. This letter was very carefully prepared, checked out with steering committee members and several others,* and rewritten several times. A copy of the letter is reproduced on the following page.

*Arthur Chickering was particularly helpful as an advisor on the tone and content of this letter.

ISR

CENTER FOR RESEARCH ON UTILIZATION OF SCIENTIFIC KNOWLEDGE / INSTITUTE FOR SOCIAL RESEARCH / THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN 48106

February 5, 1970

I would like to invite you to join in a three day collaborative effort to put together guidelines for the training of educational change agents. The meeting will be held at High/Scope in Clinton, Michigan on May 25-27, 1970. We will address ourselves principally to three questions:

1. "What do we now know about the management of educational innovation?"
2. "How can this knowledge be effectively incorporated in the pre-service and in-service training of administrators and educational consultants?"
3. "How can we initiate programs to provide this type of training for the growing number of educators across the nation who need it and are asking for it?"

By bringing together a group of thirty recognized national leaders in administration, training, research and practice, I believe it will be possible to set down some guidelines and program alternatives which are truly creative and responsive to the need. Our work will result in a published document which should have considerable impact. There will be an immediate influence on training programs now in the works and a long range influence in guiding future program planning in this area.

The sessions will be designed to allow maximum contributions from each of us and a maximum opportunity to exchange ideas. Thanks to support from the U.S. Office of Education and the Kellogg Foundation we will be able to pay expenses and travel for all participants. Additional details are provided on the attached sheets. If you have any other questions on any of this, call me collect at (313) 764-2560. Please let me know by phone or return mail if you think you will be able to join us.

Yours sincerely,

Ronald G. Havelock
Chairman

RGH:rw

The basic information on plans for the conference was spelled out in a 3-page attachment which is partially reproduced below.

"PLANNING FOR EDUCATIONAL CHANGE AGENT TRAINING
A Working Conference
High/Scope, Clinton, Michigan
May 25-27, 1970

"Objective: To pool what we know about the management of educational innovation and to generate a set of guidelines for the training of administrators and consultants who have the responsibility for directing or advising innovation programs and projects at various levels. We want to think through the whole question of what is needed to train people to be more effective change agents. Additionally, we will be concerned with how we can plan a national program or programs in this area.

"Why the Conference is Needed and Why Now:

1. Previous reports calling for more change agents and disseminators have received considerable notice. A training design is the key implementation step for establishing such roles in large numbers.

2. We are now in a better position to formulate programs than we have ever been before because of the major reviews and summaries of existing knowledge on this subject that have appeared in the last few months.

3. The federal administration is now searching for new approaches to educational reform, and officials in the U.S. Office of Education have indicated a special interest in the problem of diffusion and utilization of educational innovations.

"Your Role: You will be a contributor and resource person from your experience and from the reading you have done. There are no set roles, no papers read; we will, however, furnish a number of background materials which should be read prior to your arrival. These will help us get into the substance of the meeting very quickly.

"Meeting Structure: We will subdivide into working groups of about 8 for most of the time. The meeting will be carefully planned so that we can wind up with a high quality product and at the same time so that each man will feel he is both learning and contributing in relevant ways.

This conference, itself, should be a model for working conferences of the future. To that end, we are going to put together a number of ideas about meeting structure and participation that have been used successfully in the recent past and we are going to experiment with some new approaches as well.

"How Will the Three Days be Used:

Day #1 Implications of Research and Theory	We will spend the first day reviewing current research and theory on innovation, planned change and knowledge utilization in an effort to identify the essential facts that a change agent or an administrator with change agent responsibilities must know.
Day #2 Alternatives for Ideal Training Programs	On the second day, we will consider what we know about training and the manpower needs and resources both for trainers and trainees. By the end of this second day we should have identified a series of options or components for the ideal training program, pre-service and in-service.
Day #3 Implementation	On the final day, we will consider implementation possibilities and strategies. How to organize and fund a training program that will have national impact will be a major concern at this point. How can we get maximum utilization of what we have generated in these three days.

"Product: After the meeting, the training guidelines generated by the group will be written up, edited as a report for the U.S. Office of Education and for publication as a monograph. We are also planning to invite conferees to write brief position papers on certain critical issues as these may emerge from our discussions. These papers will then be edited and published as part of the report. Some additional funds are available for reimbursement to paper contributors."

The invitational letter and this advance descriptive material proved to be extremely effective as 56 of the original list of 75 invitees accepted outright! Of the remainder most called or sent courteous notes explaining their unavailability and regret at not being able to attend. This response left us with an embarrassment of riches. Since we had more acceptances than anticipated (a maximum of 50% positive response was expected) we had two problems, first to pay for the additional travel costs,* and second to design a meeting which could involve more attendees.

It was also pleasing to note that we had acceptances from people in each of the seven categories although as it later turned out, two chief state school officers (Massachusetts and Colorado) who had accepted were unable to attend. Altogether 50 of the 57 persons who accepted invitations participated in the conference.

*Again CRUSK helped us with some additional support from the Kellogg grant.

4. *The Conference (CECAT)*

On May 25, 1970 the "Conference on Educational Change Agent Training" (CECAT) began on schedule at a secluded conference center in a country setting* at Clinton in southeastern lower Michigan. Most participants arrived Sunday evening, May 24, for dinner and had an opportunity to get acquainted or reacquainted informally before the actual work of the meeting began.

Each participant had previously been mailed a number of materials including a paper by Goodwin Watson summarizing the research literature on research utilization,** Planning for Innovation by Havelock, et al, a 500 page work presenting a comprehensive summary of the literature on planned change, dissemination, and utilization as of 1969, the "Guide" (prototype #3) and another practitioner-oriented manual on the change process prepared by Everett Rogers and Lynn Svenning for "Operation PEP," a Title III project based in the San Mateo, California school district.

In addition each participant had been provided with an extensive reaction form covering the major findings reported in these readings. The form asked for their theoretical orientation, their judgment of the importance of various topics and their choice of a topic on which they could serve as a special informant and resource person to others at the conference. Nearly all participants had faithfully completed this form and returned it to us prior to May 20th so that we were able to collate responses and provide every member with a collective profile of knowledge levels, attitudes, and interests of those attending the meeting.

Charles Jung also prepared a list of generalizations on the training process derived from research findings. We hoped that participants would peruse these two documents fairly carefully to get a feel for what would be discussed the first two days.

After a brief orientation session on Monday morning the participants divided into six groups of about 8 members each; these groups were pre-selected to be more or less homogeneous on the basis of theoretical orientation and topic interest. They were each provided with a recording secretary and were asked to appoint a chairman to guide the discussion, to keep time so that each had a chance to make a presentation around one of the generalizations and to post the major points arising from the discussion for sharing with the other groups in the late afternoon.

*Actually, because of the number of participants and the small number of private rooms, many had to double and triple up. This caused considerable discomfort to some. The site chosen proved to be a significantly negative feature of the conference.

**Prepared for an NIMH contract to Edward Glaser and the Human Interaction Research Institute to prepare a manual on the use of research results in mental health.

The newsprint summaries of each group's discussion of the day were posted in the large meeting room and participants were encouraged to "walk around" to inspect and consider the points made by other groups.

On the evening of the first day, these same subgroups met once more, this time to consider the several additional topic items that participants had added to the list on the pre-conference feedback form. These "hot issues" discussions were undoubtedly a highlight of the conference for many participants as there was an opportunity to explore issues of great personal concern and currency with a distinguished group of colleagues. Some of these sessions continued well into the late evening hours.

The second day began with a panel discussion of training "experts" on issues particularly germane to training per se. Kenneth Benne, Matthew Miles, Lucille Schaible, Irving Millgate, Ronald Lippitt, Floyd Mann, and Max Goodson each made a brief presentation on training issues followed by a general discussion including all participants.

Following this general meeting a new set of subgroups was formed with each of the panel members as chairman of a group. The groups were intended to discuss and post key training issues using as resources (1) the Jung list of generalizations on training, and (2) the panel discussion.

It appeared in retrospect that the device of a "panel" was somewhat divisive since many other participants had expertise in this area and may have resented the apparent elevation of a few. Although the conference chairman (Jung) and the organizer (Havelock) thought the panel was very stimulating, it was not rated highly by most participants.

On Tuesday afternoon Jung and Havelock explained the nature of the task for the last day, to work in teams to develop training designs and in the process speak to seven questions:

"(1) Define the change role, provide a rationale and state limiting assumptions.

(2) Minimal preconditions for selection/training of trainers and trainees.

(3) Maximal outputs from training.
...attitude and value
...knowledge
...skills

(4) Ways to provide required training (e.g., timing, scheduling, setting, types of materials, types of experiences).

(5) How to set role in an institutional context.

(6) Criteria for success in the role.

(7) Evaluation process."

Following this orientation, concerned participants were invited to post an idea for a change role or situation for which a training program of some kind was needed. The question of level was also left open. After these ideas were posted all the participants were asked to read them and to sign up under them if they wanted to participate in that task force. By this process seven task groups were formed ranging in size from two to seven members. In addition, four participants chose to work alone developing their own models.

The first task force sessions on Tuesday afternoon were intended to explore the role concept under consideration more fully and to answer the first question on the outline (role definition and rationale). Tuesday evening Havelock, Jung, and Clemens were to screen the preliminary task force outputs and provide feedback and comment on additional points and clarifications that should be made in the Wednesday morning discussions.

On Wednesday the first two hours were devoted to concluding the task force work. At 11:00 a.m. the task force reports were posted in the large meeting room and output of each task force was summarized by a spokesman. Reactions and clarifications from all participants were offered.

A final session of the conference dealt with next steps which might be taken to advance the training of change agents and reactions to this conference. This meeting was unfortunately too brief to reach much closure and was rated as less than completely satisfactory by those who were still present.

5. *Aftermath of the Conference*

At the close of the conference each member was presented with a long evaluation form which asked for ratings and reactions to each segment including advance materials, over-all design, group sessions, panel, informal discussions, and task force meetings. Forty-one responses were received representing about 90% of the participants who were able to stay with the conference for the three days, exclusive of the chairman and organizer. These responses are analyzed in Section III of this report.

Immediately after the conference Havelock set about preparing guidelines for a model training program for State Education Agency change specialists (Interim Report submitted June 30, 1970). In developing this plan, he reviewed the task force outputs and panel presentations, and followed a modified form of the task force structure (with an additional eighth element "utilization of evaluation"). However, it soon became evident that the rich and loosely structured output of the conference, though a good stimulus, had to be augmented considerably from other sources. This training model design is now incorporated as Part VI of the "Manual on Educational Change Agent Training" (Attachment #3 of this report).

Starting in June of 1970, CRUSK staff and assistants including Joyce Kornbluh, Roberta McConochie and Mary Havelock began editing task force reports filling in gaps and composing prose drafts from the telegraph notes and outlines left by CECAT. This proved to be a very difficult and frustrating task. In some cases they were able to solicit revised copy from one or another of the contributors. In other cases an edited version was circulated among all contributors of that task force for comment. In still other cases editorial judgment indicated that the primary thoughts should be incorporated in other parts of the manual but that a "design" could not be reported as such. These judgments were especially agonizing because of the investment of effort and interest which the task forces represented to all concerned.

Recorders' notes from each of the Monday and Tuesday subgroup sessions were also edited and typed. This material is not included directly in this report but was used in preparing Parts I - IV of the Manual on Training.

The final task under this contract was intended to be the writing of alternative training designs based on the conference (CECAT). The State Agency design represented one effort in this direction. However, it became apparent after the conference (a) that there was a large variety of alternative concepts of change role and change process training and (b) that the conference, per se, did not provide enough detailed input for the full description of any one of them. Therefore the project director decided that the optimum product would be a manual on training design which would give a detailed analysis of the considerations, principles, and elements that should be incorporated in <u>any</u> such program regardless of level or specific focus. In addition this manual would include the State Agency model (the interim report of June 1970) as a fully developed example, and the most fully articulated task force reports as image-makers for would-be program developers in different areas.

Project director Havelock had other commitments in the fall and winter of 1970-71 which prevented him from following through on this "manual" concept. Kornbluh and others attempted to develop this product based on existing notes and outlines but they found that they did not have enough background to complete the job. The present manual (Attachment #3) was composed largely by Havelock in the summer of 1971.

6. *Plans for Final Production and Distribution of the Manual*

After this report is submitted to USOE, the manual will be further edited and refined so that it is suitable for publication.*

A limited edition will then be published probably before the end of 1971 and copies will be sent to CECAT participants as promised earlier. Large volume sales of this document are not anticipated although its utility to a specialized audience of trainers and training designers should be very high indeed. Publication will be by the Institute for Social Research publications division and no claim will be made for copyright at least over materials prepared for the USOE contract.

*This work will be undertaken without the use of Federal funds.

By an overwhelming vote of 36 - 3 (with two abstentions) CECAT members expressed a desire to reconvene within a two year period. We have no current plans to do so but strongly recommend that USOE take further steps in this direction. CECAT was not in itself an unqualified success; it did not produce the kind of product with the detail and clarity we had hoped for, but it did demonstrate that there was a great interest in this area across the nation among educational leaders, and to some extent it indicated that there is a community of thought on what is needed. Another CECAT or series of CECATS (regionally or topically focussed, perhaps) with adequate funding for advance preparation and follow up, would start a significant movement for educational reform in the United States.

Section II: EVALUATION OF THE "GUIDE" (PROTOTYPE #2) BY 115 CHANGE AGENTS*

A. The Reviewers

As described in Section I above, letters were sent out in the fall of 1969 to 200 educators in typical change agent roles asking if they would agree to review the "Guide" for us. This letter is reproduced as Appendix A to this section. Of the 200 educators whom we initially contacted 151 agreed to review the "Guide" and they returned to us a form giving a brief description of their professional activities. This form is reproduced as Appendix B of this section. When prototype #2 of the "Guide" was prepared we forwarded this to them together with an extensive review form, which is reproduced, along with its cover letter, as Appendix C to this section. This review form was actually completed and returned to us by 115 people, or 75.6% of those who had consented to review the "Guide."

We initially planned to draw our sample of reviewers from four areas which we felt were representative of typical potential users of the "Guide." These areas were: 1) State Department of Education personnel who act as consultants, coordinators and disseminators; 2) Directors of local innovation projects supported by ESEA Title III; 3) Regional Educational Laboratory dissemination staff; and 4) professors of education. We did carry out this plan but we also decided to include a sample of educators chosen from local school district personnel. We knew that our sample of Title III directors would give us some indication of how well the "Guide" would be received at the local level, but we also felt that these individuals are often engaged in fairly specialized programs of questionable permanence. We therefore decided that a sampling of local educators in general would give us a broader indication of the extent of the audience to which the "Guide" might appeal.

We wanted our reviewers to be representative of educators throughout the nation, so our initial letter asking change agents to review the "Guide" was sent out to educators in all 50 states and the District of Columbia. Since not all of those whom we initially contacted actually completed the review form, not every state was represented in the final sample. The sample was still widely representative, however, with the 115 reviewers coming from 37 states and the District of Columbia. Table II.1 shows the national distribution by states of the reviewers in each of our five sub-groups.

[Insert Table II.1 here]

The positions held by the reviewers were quite diverse, but a brief general characterization of those in each group may be made. There were a total of 41 reviewers in the State Department group, and of these, 19 were directors or coordinators of programs which ranged from vocational rehabilitation to statewide planning and dissemination. Ten were supervisors or superintendents of departments within the state departments of education, and eight were consultants or research utilization specialists. The four remaining members of this group were planners and project developers.

*This section was prepared by Mary C. Havelock.

TABLE II.1 National Representation in Sample of Reviewers

T = Total for State L = Local R = Regional Labs
S = State Department III = Title III Directors O = Other

State	T	S	III	R	L	O
Alabama	4	1	1	-	1	1
Alaska	0	-	-	-	-	-
Arizona	0	-	-	-	-	-
Arkansas	0	-	-	-	-	-
California	13	5	1	4	3	-
Colorado	1	1	-	-	-	-
Connecticut	1	-	1	-	-	-
Delaware	1	-	-	1	-	-
Washington, D.C.	1	-	-	-	-	1
Florida	2	2	-	-	-	-
Georgia	2	-	1	1	-	-
Hawaii	0	-	-	-	-	-
Idaho	0	-	-	-	-	-
Illinois	3	2	-	-	-	1
Indiana	0	-	-	-	-	-
Iowa	3	-	1	-	2	-
Kansas	2	-	1	-	1	-
Kentucky	3	-	-	1	2	-
Louisiana	0	-	-	-	-	-
Maine	1	-	1	-	-	-
Maryland	1	-	-	-	-	1
Massachusetts	3	1	-	1	1	-
Michigan	14	6	1	1	4	2
Minnesota	3	1	-	1	1	-
Mississippi	0	-	-	-	-	-
Missouri	5	1	-	3	1	-

State	T	S	III	R	L	O
Montana	1	-	1	-	-	-
Nebraska	1	-	1	-	-	-
Nevada	1	-	-	-	1	-
New Hampshire	1	-	1	-	-	-
New Jersey	1	1	-	-	-	-
New Mexico	2	-	-	2	-	-
New York	10	9	-	1	-	-
North Carolina	5	-	2	-	2	1
North Dakota	0	-	-	-	-	-
Ohio	1	-	1	-	-	-
Oklahoma	0	-	-	-	-	-
Oregon	2	-	1	1	-	-
Pennsylvania	7	-	3	2	-	2
Rhode Island	1	-	1	-	-	-
South Carolina	4	2	1	-	-	1
South Dakota	6	6	-	-	-	-
Tennessee	1	-	-	1	-	-
Texas	2	1	-	1	-	-
Utah	1	1	-	-	-	-
Vermont	0	-	-	-	-	-
Virginia	3	-	-	-	2	1
Washington	0	-	-	-	-	-
West Virginia	0	-	-	-	-	-
Wisconsin	1	1	-	-	-	-
Wyoming	1	-	1	-	-	-
TOTAL	115	41	21	21	21	11

Our reviewers included 21 ESEA Title III directors, 14 of whom listed themselves as directors of special programs which ranged from curriculum research to in-service education. The remaining 7 members of this group were administrators, either school principals, superintendents or administrative assistants.

Of 21 reviewers from the Regional Educational Laboratories, one was a laboratory director and another was an assistant director. The group included 12 directors or coordinators of various programs such as individual learning and teacher training. The remaining seven reviewers in this group held a variety of positions, mainly as assistants to the professional staff of the laboratories.

Our sample of 21 local school educators included six superintendents of schools and three principals or vice-principals. Nine members of the group were directors of programs which typically served an entire school district; "Director of Research, Development and Planning" and "Director of Secondary Education" were typical job designations. One reviewer was an educational researcher and two were administrative assistants.

Our sample of professors of education was the smallest group, with only seven respondents in this category. Their areas of specialty ranged from community activities to educational research.

Four additional educators who reviewed the "Guide" could not readily be classified as belonging to one of our five respondent groups. These included a Program Manager for the Department of Health, Education and Welfare and a director of educational research and training. We combined the responses of these educators with those of the professors of education to make a total group of 11 respondents which we designate as "other" in reporting the responses to the review form.

We asked all our reviewers to indicate the activities in which they were involved as educators and change agents, either full or part time (see Appendix B of this section). Their responses to this question are presented in Table II.2, which shows the percentage of each respondent group involved in each of 12 areas of professional activity.

[Insert Table II.2 here]

All groups have a very high percentage of respondents engaged in administrative duties, with a total of 71.3% of all respondents spending at least part of their time in this area. Just as outstanding is the fact that apart from the "other" group, which includes the university professors, a very low percentage of respondents are engaged in teaching.

The balance of their time seems to be spent primarily in research, development, in-service education, and consultation, with some groups being quite involved in committee and task force work. They also have apparent high interest in maintaining professional relationships; 80% of respondents belong to at least one professional organization, and the average number of memberships for all reviewers is four. Judging from this profile I think we can conclude that these educators are indeed acting in typical change agent roles; they are interested in and have access to many sources of new ideas and they are engaged in many activities which would serve to bring their information to the attention of others.

TABLE II.2 Professional Activities of Reviewers

	State Dept.	Title III	R.E.L.	Local	Other	All Groups Total
Number of Respondents	41	21	21	21	11	115
Average Age	45	47	38	42	44	43.5
Highest Academic Degree:						
Doctorate	50%	50%	63.2%	42.1%	80%	53.8%
Masters	50%	45%	26.3%	57.9%	20%	43.3%
Bachelors	0	5%	10.5%	0	0	2.9%
Professional Activities - Percent Responses:*						
Teaching	17.1	14.3	19.0	19.0	63.6	21.7
Special Services	26.8	28.6	19.0	4.8	9.1	20.0
Counselling	12.2	4.8	4.8	4.8	18.2	8.7
Administration	63.4	76.2	61.9	90.5	72.7	71.3
Research	63.4	52.4	81.0	38.1	63.6	60.0
Development	63.4	47.6	81.0	52.4	36.4	59.1
In-Service Education	48.8	42.9	42.9	28.6	72.7	45.2
Consultation	56.1	28.6	42.9	14.3	63.6	41.7
Title I - ESEA	4.9	28.6	4.8	33.3	18.2	15.7
Title III - ESEA	39.0	90.5**	9.5	0	9.1	33.0
Participation in committees, task force, etc.	39.0	47.6	23.8	14.3	63.6	36.5
Membership in Professional Organizations	85.4	85.7	71.4	76.2	72.7	80.0

*Percents for each group do not total 100% because respondents could check more than one item.

**The percent of "Title III group" respondents who indicate they are involved in Title III programs does not total 100% because some respondents in that group had recently completed their Title III programs. We left them in this group since their responses to the handbook would still be representative of those of other Title III program directors.

One additional fact might be noted; none of our sample of local school district personnel turned out to be engaged in ESEA Title III programs. Thus our judgment that Title III program directors would not necessarily represent a typical sample of educators at the local level seems to be correct.

B. Responses to the Review Form

There was no specific question on the review form asking the respondents to give an overall evaluation of the "Guide." Reviewers were asked about the extent of their interest in each individual section, however, and these responses are presented in Table II.3.

TABLE II.3 Overall Interest in the Handbook: Percent Ratings

	Very Good - Good Quite Interesting	Adequate Somewhat Interesting	Somewhat Inadequate - Very Inadequate Not Very Interesting	Total
Introduction	75.3	18.0	6.7	100
Case Studies	60.7	35.9	3.4	100
Stages*	79.7	15.1	5.2	100
Total Handbook	76.4	18.4	5.1	100

*Ratings are given for each individual stage in Table II.9.

The Introduction and each of the chapters on the six stages were rated on a 5-point scale from very good to very inadequate. The top two categories (very good and good) were combined in the above table, as were the lowest two categories (somewhat inadequate and very inadequate). The case studies were rated on a 3-point scale of "quite interesting," "somewhat interesting," and "not very interesting." We feel we made an error in judgment in asking for a rating on this particular scale since the words "somewhat" and "quite" do not convey precise levels of distinction.

Despite possible confusion on this score, however, we can still see clearly from Table II.3 that the "Guide" as a whole was very favorably received, with 76.4% of all reviewers rating it as good or very good in interest.

1. *Evaluation of the Introduction*

In addition to asking the respondents to rate the Introduction on interest level, we asked questions which were designed to elicit the reviewers' judgments as to whether or not the Introduction was effective in fulfilling its objectives. In response to the question

"Does it serve to show who a 'change agent' is?" the reviewers rated it as 4.0 on a five point scale (with 5.0 representing "very good" and 1.0 representing "very inadequate"). On this same scale the question "Does it make the objectives of the handbook clear?" received a mean response rating of 4.1.

In order to aid us in the revision of the Introduction we asked several additional specific questions which received the following mean responses (again 5 represents "very good," 1 represents "very inadequate"):

writing style: 4.3
organization: 4.0
clarity of pictures and diagrams: 3.1
value of pictures and diagrams: 3.6

We felt that although the general reception of the Introduction was good, the responses nevertheless indicated some deficiencies. We therefore rewrote the Introduction, making a particular attempt to improve the pictures and diagrams.

2. *Evaluation of the Case Studies*

The rationale for inclusion of the case study materials was, of course, to give concrete examples which would serve to illustrate the material of the later chapters ("stages"). The case studies could be considered a success only if they adequately served this purpose. We therefore asked our reviewers whether they found the references to the case studies in the text of Part II to be useful. The response was gratifying; 80.0% of reviewers did feel they were useful. Another 9.4% felt they were not needed, while 10.6% found them to be either difficult to follow or distracting. Because of this very favorable response, we added more references to the case studies when we prepared Prototype #3 of the "Guide."

Table II.4 shows responses of the reviewers to questions about the detail, length and number of case studies presented.

[Insert Table II.4 here]

Clearly we hit it just right in terms of length and detail of the case study material. We seem to have about the right number as well, although 25.3% of reviewers would have liked to have more.

We were also interested in how relevant each individual case study might be to the experience of each group of respondents. Reviewers were asked to rate each case study on the basis of how typical it was of situations in which they themselves or someone they knew were involved. These responses are given in Table II.5.

[Insert Table II.5 here]

TABLE II.4

Case Study Detail, Length and Number:
Percent Ratings

	Too Detailed	Right Amount of Detail	Not Enough Detail	Total
Detail	8.1%	83.7%	8.1%	100%
	Too Long	Right Length	Too Short	Total
Length	10.5%	83.7%	5.8%	100%
	Too Many	Right Number	Too Few	Total
Number	1.2%	73.5%	25.3%	100%

TABLE II.5

Typicality of Each Case Study:
Mean Rating* by Each Respondent Group

	Linda (Black Studies)	Mike (Sex Education)	Steve (Staff Development)	Henry (Social Studies Curriculum)	TOTAL
State Dept.	3.3	4.1	4.5	3.3	3.9
Title III	3.3	4.3	4.2	3.5	3.8
R.E.L.	3.2	4.3	3.7	3.8	3.8
Local	3.6	4.4	4.1	3.9	4.0
Other	3.8	4.3	4.7	3.6	4.1
Total-All Groups	3.4	4.3	4.2	3.6	3.9

* 5 = "very typical"; 1 = "not typical"

Though two of the case studies (Mike and Steve) were regarded as more typcial than the others, the case studies as a whole were rated as quite typical. Over all, the selection of case studies had roughly equivalent appeal to each group of respondents, although certain case studies seemed to be considered especially typical by different groups. Each group rated at least one case study at least as high as 4.3; the case study materials seem to be representative of a wide variety of change situations in education.

In Table II.6 we show the percentage of respondents who rated each of the case studies in each level of typicality. Even though the cases of Mike and Steve clearly led in ratings, this Table shows that a large portion of reviewers considered the cases of Linda and Henry as equally or more typical.

TABLE II.6 Typicality of Each Case Study: Percent Ratings by all Respondent Groups Combined

	Very Typical 5	4	3	2	Not at all Typical 1	TOTAL
Linda	23.3	24.4	27.9	16.3	8.1	100
Mike	60.2	17.0	13.6	6.8	2.3	100
Steve	48.3	33.3	12.6	4.6	1.1	100
Henry	21.2	43.5	16.5	10.6	8.2	100
TOTAL	38.4	29.5	17.6	9.6	4.9	100

3. *Evaluation of the Six Stages*

We were particularly concerned to find out whether the organization of the handbook around the concept of six "stages" of innovation would be judged as realistic and helpful by typical change agents. Responses to questions eliciting this information are presented in Table II.7.

[Insert Table II.7 here]

We were pleased to find that our reviewers did consider these "stages" to be clearly defined as distinct steps in the process of innovation; 83.7% felt that they were "mostly clear" or "very clear."

TABLE 11.7 The Six Stage Model

	Percent Ratings						Mean Ratings*
	Very Clear	Mostly Clear	Adequately Clear	Somewhat Clear	Not at all Clear	Total	
Are the stages distinct steps in the process of innovation?	55.8	27.9	11.6	3.5	1.2	100	4.3
	Very Useful	Mostly Useful	Adequately Useful	Not too Useful	Not at all Useful		
Are the stages divided into useful groupings for your change efforts?	34.5	33.3	24.0	8.3	0	100	3.9
	Very Good	Good	Adequate	Somewhat Inadequate	Very Inadquate		
Are the individual stage materials useful - do they apply to your own work?**	54.3	27.6	11.7	5.1	1.2	100	4.3

* 5 = "very clear"; "very useful"; "very good"
1 = "not at all clear"; "not at all useful"; "very inadequate"

**Responses to this question are given for each respondent group and each stage in Tables 11.8, 11.9 and 11.10.

The other two questions in Table 11.7 show an apparent discrepancy. The first of these questions on the usefulness of the six stages was asked relative to the six stage model. The second was asked with regard to the usefulness of each individual stage, with the responses to each of the six stages being combined in this Table. Evidently the reviewers found it easier to see the utility of each stage individually than to imagine themselves as approaching innovation in terms of a six stage process. Hence, it may be somewhat more difficult for change agents to accept the overall strategy suggested in the "Guide" than to adopt specific procedures and tactics related to the strategy.

Tables 11.8, 11.9, and 11.10 give detailed responses to the question on usefulness which was asked about each individual stage. The question was: "Usefulness: could you think of ways this stage applied to your own work?". Table 11.8 shows the mean ratings each respondent group gave to each stage.

TABLE II.8

Usefulness of the Six Stages:
Mean ratings* of each stage by each respondent group

Group	Relationship Building: Stage I	Diagnosis: Stage II	Acquiring Resources: Stage III	Choosing Solution: Stage IV	Gaining Acceptance: Stage V	Stabilizing: Stage VI	All Stages
State Dept.	4.5	4.3	4.1	4.5	4.6	4.4	4.4
Title III	4.7	4.2	4.0	4.5	4.2	4.0	4.2
R.E.L.	4.1	4.2	3.7	4.2	4.7	4.4	4.2
Local	4.2	4.4	3.9	4.1	4.2	4.5	4.2
Other	4.3	4.5	4.1	4.4	4.8	4.0	4.4
TOTAL	4.4	4.3	4.0	4.4	4.5	4.3	4.3

* 5 = very good, 4 = good, 3 = adequate, 2 = somewhat inadequate, 1 = very inadequate

Table II.9 presents the percent ratings to this same question on each stage by all reviewers combined.

TABLE II.9

Usefulness of the Six Stages
Percent ratings of each stage by all respondent groups combined

Stage	Very Good	Good	Adequate	Somewhat Inadequate	Very Inadequate	Total
I. Relationship Building	59.3	25.9	8.6	4.9	1.2	100
II. Diagnosis	55.7	28.4	9.1	5.7	1.1	100
III. Acquiring Resources	42.7	28.1	15.7	11.2	2.2	100
IV. Solution Choosing	58.8	23.5	12.9	3.5	1 2	100
V. Gaining Acceptance	60.2	28.9	7.2	3.6	0	100
VI. Stabilization	50.0	31.0	16.7	1.2	1.2	100
All Six Stages Combined	54.3	27.6	11.7	5.1	1.2	100

Table II.10 presents the percent ratings by each respondent group of all six stages combined.

TABLE II.10

Usefulness of the Six Stages
Percent ratings by each respondent group of all six stages combined

Group	Very Good	Good	Adequate	Somewhat Inadequate	Very Inadequate	Total
State Dept.	59.5	26.0	9.2	4.6	0.6	100
Title III	55.9	23.4	10.8	9.0	0.9	100
R.E.L.	47.2	36.0	10.1	3.4	3.4	100
Local	49.5	27.8	17.5	4.1	1.0	100
Other	55.0	27.5	15.0	2.5	0	100
TOTAL - All Groups	54.3	27.6	11.7	5.1	1.2	100

These three tables show no clear differences among the respondent groups on how useful they consider the six stages to be as a whole. However, different groups seem to feel that different stages apply more directly to their own work. The tables also show that although Stage III received an overall "good" rating, it is regarded by all groups to be the least useful.

The overall rating of interest in the six stages was presented in Table II.3. In Table II.11 this information is presented for each of the stages individually.

[Insert Table II.11 here]

Stage III seems to be lagging behind in interest as well as in usefulness, but apart from this we were very pleased with the reaction of our reviewers to the stages. Only 5.2% of respondents felt the six stages to be of inadequate interest, and only 6.3% felt them to be of inadequate usefulness.

TABLE II.11 Interest of the Six Stages
Percent ratings and mean ratings of each stage by all respondent groups combined

Stage	Percent Ratings						Mean Ratings
	Very Good	Good	Adequate	Somewhat Inadequate	Very Inadequate	Total	
I. Relationship Building	42.6	38.3	14.9	4.3	0	100	4.4
II. Diagnosis	44.8	33.3	16.1	5.7	0	100	4.2
III. Acquiring Resources	34.6	29.6	23.5	12.3	0	100	3.8
IV. Solution Choosing	54.8	29.8	11.9	3.6	0	100	4.4
V. Gaining Acceptance	55.6	32.1	9.9	1.2	1.2	100	4.4
VI. Stabilization	43.4	39.8	14.5	2.4	0	100	4.2
All Six Stages Combined	46.2	33.5	15.1	5.0	0.2	100	4.2

* 5 = "very good"; 1 = "very inadequate"

Finally, we asked several more questions designed to aid us in our task of revising the "Guide." We asked the reviewers to rate each stage on writing style, organization, completeness and value of quotations. The mean ratings on these ranged from 4.0 to 4.3 on all stages combined, but Stage III received the lowest ratings on each of these dimensions (3.6 - 4.0). This information, together with the fact that Stage III had rated lowest on interest and usefulness, led us to the conclusion that Stage III would need the most extensive revision. Accordingly, we completely reorganized and recomposed Stage III, and we felt much more satisfied with it as it appeared in the new draft, Prototype #3. We made minor changes in the other five stages in response to specific suggestions by reviewers.

4. *Evaluation of the Appendices*

We asked the reviewers to rate the usefulness of each appendix as a handy reference to other more complete resources which a change agent might want to use. These responses are presented in Table II.12.

[Insert Table II.12 here]

We found these responses to be very gratifying, and we were especially pleased to note that only 1.7% of reviewers considered the appendices to be of little value. Thus, apart from the updating of Appendix C, which was necessary due to obsolescence, we felt no significant changes in the appendices were called for in the preparation of Prototype #3.

TABLE II.12

Usefulness of the Appendices
Percent ratings and mean ratings

Appendix	Very Useful	Mostly Useful	Adequately Useful	Not Too Useful	Not at All Useful	Total	Mean Ratings*
	Percent Ratings						
A. Strategies and Tactics	58.5	24.4	13.4	3.7	0	100	4.4
B. Information Sources	66.7	22.2	9.9	1.2	0	100	4.5
C. Annotated Bibliography	58.9	27.4	13.7	0	0	100	4.5
Total - All Appendices	61.4	24.6	12.3	1.7	0	100	4.5

* 5 = "very useful"; 1 = "not at all useful"

5. *Evaluation of Proposed Additions to the "Guide"*

We proposed several additions which might be made to the "Guide" and asked each reviewer to evaluate each on the basis of potential usefulness in his own particular work as a change agent. These responses are given in Table II.13.

TABLE II.13

Desirability of Proposed Additions
Percent ratings and mean ratings

	Essential	Good Idea	No Opinion	Not Necessary	Bad Idea	Total	Mean Ratings*
	Percent Ratings						
Section on preparing for the role of change agent	29.5	57.7	7.7	5.1	0	100	4.1
Checklists for each stage	35.1	44.2	13.0	6.5	1.3	100	4.1
Training Programs	35.1	48.1	7.8	9.1	0	100	4.1
Appendix of names of other change agents	13.2	51.3	11.8	21.1	2.6	100	3.5

* 5 = "essential"; 1 = "bad idea"

These responses confirmed what we had already suspected; several additions to the handbook could prove to be very valuable and useful. Checklists of procedures and major points have been prepared to accompany each of the six stages. These checklists, as we mentioned above, are contained in "Attachment #2" of this report.

We described in Section I above the history of our development of change agent training program designs. The design which evolved, and which we have called "Manual on Educational Change Agent Training," is Attachment #3 of this report.

Rather than adding a section on preparing for the role of change agent to the "Guide" itself, we have included an extensive discussion of this subject in the Training Manual. Additionally, we have amended the Introduction of the "Guide" to include more discussion on defining the role of change agent.

Considering the relatively low response rating given to the idea of adding an appendix of names and addresses of change agents, and also considering the difficulties involved in keeping such a list up to date, we have decided against making such an addition. Thus, all but one of the proposed additions suggested above have now been prepared.

Section II

APPENDIX A

Letter of Invitation to Potential Reviewers of the "Guide"

(Prototype #2)

ISR

CENTER FOR RESEARCH ON UTILIZATION OF SCIENTIFIC KNOWLEDGE / INSTITUTE FOR SOCIAL RESEARCH / THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN 48106

I am writing to ask for your help in reviewing a new book. We are developing a handbook on the process of change and innovation in education. The book, A Guide to Innovation in Education, is written for educators who are involved in getting innovations implemented by schools and school systems. It describes the process of change within individuals, groups, and organizations and suggests specific procedures that can be used to facilitate this process. This handbook is based on considerable research on how people adopt innovations and come to utilize scientific knowledge. The research material was reviewed by Dr. Ronald G. Havelock in a report entitled The Dissemination and Utilization of Knowledge: A Comparative Survey and Theoretical Analysis of the Literature, 1969, now available through ERIC. (Both projects are being supported by the Research Utilization Branch of the U.S. Office of Education.)

In order to test the relevance of our efforts on the handbook, we need to get the reactions of a few key educators to our first draft. We would like to have you read over the first draft and give us your reactions to it on a brief questionnaire. For your help we will send you a complimentary copy of the final version of the handbook.

We would send you the draft and questionnaire early in October, hoping to make the final version available by February, 1970. Naturally, we would want to have your responses as early as possible for use in revising the draft.

We have enclosed with this letter a copy of the introduction to the handbook. If, in reading it over, you feel that you would like to participate in reviewing the draft of the entire work, please return the enclosed form to us by September 19, 1969. If the handbook is not relevant to your particular job, please pass this information along to someone else in your organization whom you think would find such a tool useful.

If you have any questions, do not hesitate to call me collect at (313) 764-2560.

Sincerely,

(Mrs.) Janet C. Huber
Assistant in Research

JCH:rw
Enclosures

Section II

APPENDIX B

Form for Background
Information on Reviewers

I would like to receive a complimentary copy of the final version of A Guide to Innovation in Education in exchange for reading the first draft of this manual and responding to a brief questionnaire about it.

Name: ______________________________

Title: ______________________________

Organization: ______________________________

Address: ______________________________

____

Phone: ______________________

Education (Number of years or highest degree earned and field of specialization):

____

Age: __________

Please check ALL of the following items that describe your current role (either part-time or full time) as an educator and change agent.

______Teaching (Subject and/or grade level:______________________________)

______Special Services (Instructional Materials Specialist, Reading Consultant, etc. Specify:______________________________)

______Counseling

______Administration

______Research

______Development

______In-Service Education Instruction

______Consultation (Type of client and speciality:______________________)

______Title I - ESEA (Type of Project:______________________________)
Project Director ______ Project Staff ______

______Title III - ESEA (Type of Project:______________________________)
Project Director ______ Project Staff ______

______Participation in Committee, Task Force, Project, etc. (Please list the title of the groups and clarify, if necessary, on the back of this form)

______Membership in Professional Associations (Please list on the back of this form)

______Other (Please specify:______________________________)

Return this form in the enclosed envelope to: INSTITUTE FOR SOCIAL RESEARCH
P.O. Box 1248
The University of Michigan
Ann Arbor, Michigan 48106

Section II

APPENDIX C

Reviewer Questionnaire
and Cover Letter

ISR

CENTER FOR RESEARCH ON UTILIZATION OF SCIENTIFIC KNOWLEDGE / INSTITUTE FOR SOCIAL RESEARCH / THE UNIVERSITY OF MICHIGAN

ANN ARBOR, MICHIGAN 48106

December 2, 1969

Thank you for offering to assist in reviewing <u>A Guide To Innovation in Education</u>. Enclosed is the first draft of that handbook and the questionnaire, as promised in our previous letter to you. You may wish to glance through the questionnaire first and then fill in your reactions as you are reading the handbook. We also urge you to add comments and suggestions on issues not adequately covered in this questionnaire.

We regret that we were unable to send you this draft as early as we had hoped, but we would appreciate the return of your questionnaire at your earliest convenience. We do still expect to have the final version available sometime this spring and will be sending you a copy at that time.

Again, if you have questions on any of the enclosed materials, please call me collect at (313) 764-2560.

Sincerely,

Ronald G. Havelock, Ph.D.
Project Director

Enclosure: <u>A Guide to Innovation in Education</u>
"Reviewer Questionnaire"
Return envelope for questionnaire

REVIEWER QUESTIONNAIRE

A GUIDE TO INNOVATION IN EDUCATION

by

Ronald G. Havelock

The sections of this questionnaire correspond to parts in the handbook:

A. Introduction
B. Case Studies
C. S ages of Planned Change
D. Appendices
E. Proposed Additions to the Handbook

Each section contains (1) a statement of the author's goals for that part of the handbook, and (2) several questions to get your reactions both to the goals themselves and to the manner in which they were fulfilled.

REVIEWER: ______________________

A. INTRODUCTION

The introduction should attract the interest of people who see themselves as change agents. It should clearly indicate what a change agent is and should suggest the main objectives and contents of the handbook.

		Very Good	Good	Adequate	Somewhat Inadequate	Very Inadequate
1.	Writing Style	____	____	____	____	____
2.	Organization	____	____	____	____	____
3.	Interest	____	____	____	____	____
4.	Clarity of Pictures and Diagrams	____	____	____	____	____
5.	Value of Pictures and Diagrams	____	____	____	____	____
6.	Does it serve to show who a 'change agent' is?	____	____	____	____	____
7.	Does it make the objectives of the handbook clear?	____	____	____	____	____

8. Do you have specific suggestions for the introduction?

B. CASE STUDIES

It is hoped that the case studies of real change agents' experiences ("Part One" of the handbook) will substantially increase the relevance of the handbook for the practitioners of change in education. Because so few of those people who are now serving as 'change agents' recognize themselves--or are recognized by others--as such, it is hoped that the variety of roles defined in the case studies as 'change agent' will lead many readers to identify change agent activities in their own role.

1. Are the case studies which were used typical of the kinds of problems and situations that you and other change agents you know are involved in? (CHECK THE SPACE FOR EACH CASE STUDY which best indicates how typical it is.)

	Very Typical 1	2	3	4	Not Typical 5
a. Linda (black studies):	____	____	____	____	____
b. Mike (sex education):	____	____	____	____	____
c. Steve (staff development):	____	____	____	____	____
d. Henry (social studies curricula):	____	____	____	____	____

2. Would some other example have illustrated the relevance of the handbook to your work more effectively?

____

____

____

3. Did you find that the case studies presented were (CIRCLE ONE FOR EACH LINE):

a.	too detailed	about the right amount of detail	not enough detail
b.	too long	about the right length	too short
c.	not very interesting	somewhat interesting	quite interesting
d.	too many	about the right number	too few

4. Were the references to case material (see example below) in the text of Part Two...

page 37:

THE EFFORTS OF BOTH STEVE AND MIKE WERE THWARTED BY OPPOSITION FROM ORGANIZED CITIZEN GROUPS.

_____useful for relating the theory to real life?

_____not needed?

_____difficult to follow?

_____distracting?

5. Please indicate (by page number and, where necessary for clarification, the name of the change agent) any references to case studies which you felt were not useful--or would be confusing to the reader.

C. STAGES OF PLANNED CHANGE

"Part Two" of the handbook contains the principles about change and change agentry which have been gleaned from the research literature on innovation. These principles have been presented in six "stages" representing the process of planned change from the point of view of the change agent. It was thought that this organization would be the most appropriate for a handbook which is intended for use by educational practitioners as they are caught 'in the thick of' innovating.

The Six Stage Model

1. Are the stages clearly defined for you as distinct steps in the process of innovation? (CIRCLE ONE)

   Very clear Mostly clear Adequately clear Somewhat clear Not at all clear

2. Are the stages divided into useful groupings for your change efforts in the field? (CIRCLE ONE)

   Very useful Mostly useful Adequately useful Not too useful Not at all useful

3. Should other stages be added? (If 'yes,' specify) ______________________

   ____

   ____

4. Should some stages be dropped or combined? ______________________

   ____

   ____

5. Was the dual column page set-up used throughout the six stages helpful?

   ____

   ____

The Specific Stages

(This section of the questionnaire includes a one-page rating sheet for each of the six chapters in "Part Two" of the handbook.)

Rating of: "Stage I: Building a Relationship"

		Very Good	Good	Adequate	Somewhat Inadequate	Very Inadequate
1.	Writing Style (clarity, flow, conciseness)	____	____	____	____	____
2.	Organization (Was the structure of the chapter clear and readable?)	____	____	____	____	____
3.	Completeness (Was the topic adequately covered?)	____	____	____	____	____
4.	Interest (Did it hold your attention?)	____	____	____	____	____
5.	Usefulness (Could you think of ways that it applied to your own work?)	____	____	____	____	____
6.	Value of Quotations (Were they usually 'on target'?)	____	____	____	____	____

7. Are there any important issues which we have neglected? ______________________

____

____

8. Do you have any disagreements with the position statements that we have made?

____

____

9. Are there any positions that you would like to see emphasized? ______________

____

____

10. Do you have any other suggestions for the chapter or comments on the above points?

____

____

Rating of: "Stage II: Diagnosing the Problem"

		Very Good	Good	Adequate	Somewhat Inadequate	Very Inadequate
1.	Writing Style (clarity, flow, conciseness)	____	____	____	____	____
2.	Organization (Was the structure of the chapter clear and readable?)	____	____	____	____	____
3.	Completeness (Was the topic adequately covered?)	____	____	____	____	____
4.	Interest (Did it hold your attention?)	____	____	____	____	____
5.	Usefulness (Could you think of ways that it applied to your own work?)	____	____	____	____	____
6.	Value of Quotations (Were they usually 'on target'?)	____	____	____	____	____

7. Are there any important issues which we have neglected? ________________

____

____

8. Do you have any disagreements with the position statements that we have made?

____

____

9. Are there any positions that you would like to see emphasized? ____________

____

____

10. Do you have any other suggestions for the chapter or comments on the above points?

____

____

Rating of: "Stage III: Retrieving Relevant Knowledge"

	Very Good	Good	Adequate	Somewhat Inadequate	Very Inadequate
1. Writing Style (clarity, flow, conciseness)	____	____	____	____	____
2. Organization (Was the structure of the chapter clear and readable?)	____	____	____	____	____
3. Completeness (Was the topic adequately covered?)	____	____	____	____	____
4. Interest (Did it hold your attention?)	____	____	____	____	____
5. Usefulness (Could you think of ways that it applied to your own work?)	____	____	____	____	____
6. Value of Quotations (Were they usually 'on target'?)	____	____	____	____	____

7. Are there any important issues which we have neglected? ____________________

____

____

8. Do you have any disagreements with the position statements that we have made?

____

____

9. Are there any positions that you would like to see emphasized? ____________________

____

____

10. Do you have any other suggestions for the chapter or comments on the above points?

____

____

Rating of: "Stage IV: Selecting the Innovation"

	Very Good	Good	Adequate	Somewhat Inadequate	Very Inadequate
1. Writing Style (clarity, flow, conciseness)	____	____	____	____	____
2. Organization (Was the structure of the chapter clear and readable?)	____	____	____	____	____
3. Completeness (Was the topic adequately covered?)	____	____	____	____	____
4. Interest (Did it hold your attention?)	____	____	____	____	____
5. Usefulness (Could you think of ways that it applied to your own work?)	____	____	____	____	____
6. Value of Quotations (Were they usually 'on target'?)	____	____	____	____	____

7. Are there any important issues which we have neglected? ____________________

____

____

8. Do you have any disagreements with the position statements that we have made?

____

____

9. Are there any positions that you would like to see emphasized? ____________________

____

____

10. Do you have any other suggestions for the chapter or comments on the above points?

____

____

Rating of: "Stage V: Gaining Acceptance"

	Very Good	Good	Adequate	Somewhat Inadequate	Very Inadequate
1. Writing Style (clarity, flow, conciseness)	____	____	____	____	____
2. Organization (Was the structure of the chapter clear and readable?)	____	____	____	____	____
3. Completeness (Was the topic adequately covered?)	____	____	____	____	____
4. Interest (Did it hold your attention?)	____	____	____	____	____
5. Usefulness (Could you think of ways that it applied to your own work?)	____	____	____	____	____
6. Value of Quotations (Were they usually 'on target'?)	____	____	____	____	____

7. Are there any important issues which we have neglected? ____________________

____

____

8. Do you have any disagreements with the position statements that we have made?

____

____

9. Are there any positions that you would like to see emphasized? ____________________

____

____

10. Do you have any other suggestions for the chapter or comments on the above points?

____

____

Rating of: "Stage VI: Stabilizing the Innovation and Terminating the Relationship"

	Very Good	Good	Adequate	Somewhat Inadequate	Very Inadequate
1. Writing Style (clarity, flow, conciseness)	____	____	____	____	____
2. Organization (Was the structure of the chapter clear and readable?)	____	____	____	____	____
3. Completeness (Was the topic adequately covered?)	____	____	____	____	____
4. Interest (Did it hold your attention?)	____	____	____	____	____
5. Usefulness (Could you think of ways that it applied to your own work?)	____	____	____	____	____
6. Value of Quotations (Were they usually 'on target'?)	____	____	____	____	____

7. Are there any important issues which we have neglected? ____________________

____

____

8. Do you have any disagreements with the position statements that we have made?

____

____

9. Are there any positions that you would like to see emphasized? ____________________

____

____

10. Do you have any other suggestions for the chapter or comments on the above points?

____

____

D. APPENDICES

The three appendices included in this handbook ("Part Three") are intended simply as a handy reference to other, more complete resources that a change agent may want to use.

1. How would you rate each of the appendices?

	Very Useful	Mostly Useful	Adequately Useful	Not Too Useful	Not At All Useful
a. Appendix A: Strategies and Tactics	____	____	____	____	____
b. Appendix B: Major Information Sources	____	____	____	____	____
c. Appendix C: Major Works on Change	____	____	____	____	____

2. While realizing that this handbook cannot provide an exhaustive listing of educational resources, we wish to correct any glaring oversights. Have you any additional suggestions for inclusion in:

   a. "Strategies and Tactics: A Glossary and Guide to Selection"

   b. "Major Information Sources in Education: A Directory"

   c. "Major Works on Change in Education: An Annotated Bibliography"

E. PROPOSED ADDITIONS TO THE HANDBOOK

This handbook is one part of a long range development program for innovation in education. The program calls for a variety of designs for enhancing the linkages between educational resources and educational clients. Among them will undoubtedly be some further revision of this handbook. In this initial version much thought was given to future adaptations to incorporate new information as it became available.

1. What additional aids would be most useful to you? Please rate the following suggested aids, considering what you would most like to have--or most urgently need--for your current 'on the job' work as a change agent.

	Essential	Good Idea	No Opinion	Not Necessary	A Bad Idea
a. An additional section: "Preparing for the Role of Change Agent"	____	____	____	____	____
b. Check lists of 'procedures' or 'points to remember' for each of the stages	____	____	____	____	____
c. Training programs to accompany the handbook	____	____	____	____	____
d. An appendix of names and addresses of other change agents in settings similar to yours	____	____	____	____	____
e. Other (please specify: ____ ____ ____ ____)	____	____	____	____	____

Section III: EVALUATION OF CECAT BASED ON POST-CONFERENCE REACTIONS OF PARTICIPANTS*

The participants of the Conference on Educational Change Agent Training (CECAT), held on May 25-27, 1970 in Clinton, Michigan, were asked to fill out an extensive form evaluating the effectiveness of the conference.** Forty-one participants completed this form, representing about 90% of those who were able to stay until the end of the conference. In addition to evaluating the activities of the conference itself, participants were asked to evaluate the background readings and the printed conference materials which were sent out to them before the conference. The questionnaire also solicited their views on post-conference action possibilities. In this section we will report on the participants' evaluation of these four areas.

A. Background Readings

The background reading materials were intended to provide all participants with a common base of knowledge regarding processes of innovation, planned change and knowledge utilization. It was hoped that these materials would prove to be sufficiently comprehensive and stiumlating so that we would be successful in our attempt to derive implications relevant to change agent training.

The participants were asked to give their opinion as to the value of each of the reading materials as background to the CECAT conference. They were also asked whether they considered each literature source to be a "must" item in the training of change agents. The responses to these questions are tabulated in Table III.1. Since not all participants had read each of the background sources, the percentage responses reported in this table are based only on the number of respondents who indicated they had actually read the materials.

[Insert Table III.1 here]

Since we felt that it would be unlikely that all participants would have time to read all of Planning for Innovation (approximately 500 pages), we directed their attention particularly to chapters 7 (Roles) and 11 (Summary) as being the most relevant. On the evaluation form we asked for separate ratings of these two chapters and for a rating of all other chapters combined. Table III:1 indicates that participants did indeed find chapters 7 and 11 to be particularly useful in preparing for this conference, with 97.4% of respondents regarding chapter 11 as either very useful or essential, and 86.9% rating chapter 7 in one of these two categories.

Since we were particularly concerned about participants' reactions to the "Guide," (Prototype #3), we asked for separate ratings of each section of this book. We were very pleased with the responses as a whole and felt that for a conference of this type the higher ratings for the Introduction and the six

*This section was prepared by Mary C. Havelock.

**A sample "CECAT Evaluation" form is included as Appendix A of this section.

TABLE III.1

Evaluation of Background Readings
Percent Ratings*

	Number Responding to This Item	Usefulness in Preparing for CECAT						Essential for a Training Program
		No Opinion	Not Very Useful	Somewhat Useful	Very Useful	Essential	Total	
Planning for Innovation:		%	%	%	%	%	%	
Summary Chapter (11)	39	0	0	2.6	41.0	56.4	100	60.0
Roles Chapter (7)	38	0	0	13.2	47.4	39.5	100	34.2
Other Chapters	27	0	0	40.7	44.4	14.8	100	25.9
TOTAL	104	0	0	16.3	44.2	39.4	100	41.3
Guide to Innovation:								
Introduction	35	0	2.9	11.4	45.7	40.0	100	45.7
Case Studies	36	0	13.9	22.2	44.4	19.4	100	33.3
Stages I - VI	35	0	2.9	14.3	40.0	42.9	100	51.4
Appendix A: Strategies	30	3.3	3.3	20.0	43.3	30.0	100	40.0
Appendix B: Info. Sources	31	0	12.9	25.8	38.7	22.6	100	45.2
Appendix C: Bibliography	30	0	23.3	13.3	33.3	30.0	100	43.3
TOTAL	197	0.5	9.6	17.8	41.1	31.0	100	43.1
Managing Change (Rogers and Svenning)	32	3.1	3.1	31.3	43.8	18.8	100	34.4
Using Research For Change (Watson)	33	3.0	12.1	36.4	39.4	9.1	100	21.2
The Planning of Change (Bennis, Benne & Chin)	19	0	0	5.3	57.9	36.8	100	52.6

*Percents are based on the number who responded to each item.

chapters on the stages of the planned change process were appropriate. Over 80% of respondents considered these sections to be either very useful or essential. It was also predictable that, of the appendices, Appendix A (Strategies and Tactics) would be considered the most useful for this type of conference.

Table III.1 indicates the The Planning of Change (Bennis, Benne and Chin) was potentially an excellent choice as background reading; 94.7% of those who read it found it either very useful or essential in preparing for the conference. As Table III.1 also shows, however, many people did not have the time to read a book of this length. More than half of the respondents had read none of the book, and of those who replied to the question only about half indicated that they had read the entire book, with the remainder making a sampling of a variety of articles.

The other two background readings, Managing Change (Rogers and Svenning) and Using Research for Change (Watson) were apparently not such good choices, but these were considered at least somewhat useful by most of the participants.

Table III.1 shows that the materials which were rated as most useful in preparing for CECAT were also generally considered to be most appropriate for use in the training of change agents. The Planning of Change and Chapter 11 of Planning for Innovation were again the most highly rated, with most sections of the "Guide" also being considered quite important.

Somewhat surprising, however, is the fact that only 34.2% of respondents felt the chapter on roles (Chapter 7) of Planning for Innovation to be a "must" for change agent training. We also felt that while the case study section of the "Guide" might reasonably be considered of lesser value in preparing for CECAT, it would be of key importance in making the "Guide" useful in the training of change agents. However, only one third of respondents felt this to be the case.

Participants were asked if they had additional reactions or comments on the background reading and 75% of them did. The most common comment was to the effect that the readings were appropriate and relevant. A number of people commented that they felt exceptionally well prepared for the conference and that their involvement was increased by our asking for their reactions to the readings prior to the conference. One respondent commented that the readings "created an attitude of participation and involvement in something that was going to be meaningful."

There was also some sentiment that there was too much material to read and that either summaries of the literature should have been prepared or else that special attention should have been directed toward certain key sections as was done in the case of chapters 7 and 11 of Planning for Innovation. One respondent wrote "Too much was expected for the length and type of meeting scheduled. Even if I had read everything there would not have been the opportunity to bring the learnings to bear most productively." Another participant summed it up by saying "I thought all the readings were highly relevant but feel many participants did not read them all."

We also asked participants what reading materials they would take off the list in designing a training workshop, and what other readings they would add. Fifty-six percent of respondents felt that the reading list should be cut down in some way; Table III.2 shows the percentage of respondents favoring deletion of each of the background readings.

TABLE III.2 Background Readings to be Deleted from Reading List for Training Program Percent Ratings*

Background Reading	Percent Favoring Deletion
1. Planning for Innovation: All	7.3
Planning for Innovation: Early Chapters	2.4
2. Guide to Innovation	0
3. Managing Change (Rogers and Svenning)	4.8
4. Using Research for Change (Watson)	19.5
5. The Planning of Change (Bennis, Benne & Chin): All	12.2
The Planning of Change (Bennis, Benne & Chin): Some Sections	2.4
6. Unspecified	7.3
Total	55.9

*Percents are based on all 41 respondents who handed in CECAT Evaluation Forms.

This table shows that although there is a general feeling that there is too much reading material there is no clear agreement as to exactly how it should be cut down. Probably most participants would be satisfied if the Watson article were deleted and if only certain sections of Planning for Innovation and The Planning of Change were assigned.

Participants had a wide variety of suggestions as to what might be added to the reading list for a training workshop, but here there is virtually no consensus at all. Eighteen people suggested specific additions, but only one article received as many as two mentions: this was the monograph "Change in School Systems," a COPED-NTL publication edited by Watson.* Several people did suggest that some readings should be added which covered the R&D approach more thoroughly.

*Available from NTL-IABS, 1201 Sixteenth St., N.W., Washington, D.C. One of two paperback volumes edited by Watson for COPED. (The other is "Concepts for Social Change"). $2.50 each or $4.50 for set.

B. Printed Conference Materials

In addition to the background readings, several types of printed materials were sent to participants before the start of the conference. These were designed to focus attention on different approaches to the change process and to the training of change agents. We hoped that participants would consider these materials in terms of their own conceptual frameworks and practical approaches and thus develop a clear notion of how they could apply their own experience to the task of the conference. The participants' evaluation of these materials are presented in Table III.3.

TABLE III.3 Evaluation of Printed Conference Materials
Percent Ratings*

	No Opinion	Not Very Useful	Somewhat Useful	Very Useful	Essential	Total
1. List of statements about change process from Chapter 11.	7.3	22.0	22.0	31.7	17.1	100
2. List of statements about training (by Charles Jung)	9.8	29.3	41.5	14.6	4.9	100
3. Listing of additional points made by participants before Conference	9.8	36.6	39.0	11.0	3.7	100
4. Letters and other descriptive materials from CECAT	12.2	14.6	22.0	36.6	14.6	100
Total	9.8	25.6	31.1	23.5	10.1	100

*Percent responses based on all 41 participants who turned in CECAT Evaluation Forms.

The list of statements about the change process derived from Chapter 11 of Planning for Innovation were quite favorably rated; it was to these that participants had been explicitly requested to react. All participants had been asked to fill out a form indicating their judgment of the importance of the topics in this list and to prepare to lead a discussion in the area in which they considered themselves to be particularly well-informed. This device was considered very favorably by some; one participant commented "Your efforts spent listing the key points of each change process model paid off extremely well. Your procedure for forcing people to select topics to report on was a master stroke." Not all participants shared this view, however. There were those who felt that not enough use was made of this preparation; one participant wrote "the advance materials and feedback were excellent - but we didn't build on these to the degree we should have." Other participants felt that these preparations were not relevant to the conference task; one respondent

commented "although the statements on the change process provided a basis for discussion.... I don't believe this contributed to thoughts about training."

The list of statements about training prepared by Charles Jung should have appealed to those who were dissatisfied with the focus of the change process statements. However, as Table III.3 shows, this list was not considered to be quite as useful. Part of the problem here seemed to be that this list was not sent out soon enough, and several people commented that there was an insufficient attempt made to focus discussion on it.

The listing of additional points made by participants was viewed by some people as superfluous, but others found them particularly stimulating, and a number of very lively discussions on these points were held at the conference on Monday evening.

Whatever the relative merits of the different pre-conference materials, collectively they seem to have effectively fulfilled the objective of preparing the participants for the conference and involving them in the task. One participant commented "I have never felt so well prepared for a conference as I was for this one."

C. Conference Activities

Participants were asked to evaluate each separate session of the conference as well as its general aspects. These responses are presented both as percent ratings and mean ratings in Table III.4.

[Insert Table III.4 here]

One participant wrote "I do not believe that these questions really get at the essence of what was to me a very powerful experience." Perhaps this was true for a majority of participants, since, as Table III.4 shows, the conference as a whole received a higher rating than did any of its individual parts with the exception of "opportunities available for informal discussion." Informal contacts were in fact a key to the success of the conference from the point of view of many people. The conference was described by some as the best opportunity they had ever experienced to carry on informal conversations with a wide variety of stimulating and well-informed colleagues. One participant described the gathering as "an unusual collection of experts."

The mean rating of only 3.1 for the design of the conference indicates that we made some errors in judgment here; participants on the average were only "somewhat satisfied" with the design. There was some disagreement as to whether the conference was structured too rigidly or too loosely, but the primary criticism was that not enough time had been allotted to the work in the task force groups.

From the percentage ratings in Table III.4 we can see that there was quite a range of opinion as to the success of the meetings which were held on Monday and Monday evening. This range can be largely explained by the varying success of each of the six subgroups as rated by its own members.

TABLE III.4

Evaluation of Conference Activities
Percent Ratings and Mean Ratings*

	Number Who Responded to this Item	Percent Ratings							Mean Ratings**
		Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Quite Satisfied	Very Satisfied	One of the best I have attended	Total	
1. Conference as a whole	41	0	4.9	17.1	39.0	32.9	6.1	100	4.2
2. Design of conference	41	2.4	31.7	31.7	17.1	17.1	0	100	3.1
3. Orientation Monday 9am	36	2.8	13.9	19.4	44.4	16.7	2.8	100	3.7
4. Change Process Discussions Monday	39	10.3	15.4	20.5	30.8	23.1	0	100	3.4
5. Group Summaries - Monday Coctail	36	8.3	13.9	36.1	36.1	5.6	0	100	3.2
6. Monday evening session	28	14.3	3.6	28.6	17.9	25.0	10.7	100	3.7
7. Training Panel - Tues. a.m.	36	8.3	23.6	23.6	30.6	11.1	2.8	100	3.2
8. Training Statements Groups-Tues.	35	8.6	8.6	34.3	37.1	11.4	0	100	3.2
9. Group Summaries - Tuesday Cocktail	23	4.3	17.4	47.8	26.1	4.3	0	100	3.1
10. Your Task Force & its Product	31	3.2	11.3	24.2	22.6	35.5	3.2	100	3.9
11. Other Task Force Products	29	0	20.7	31.0	27.6	20.7	0	100	3.5
12. Discussion Critique of Task Force Products	25	0	44.0	28.0	20.0	8.0	0	100	2.9
13. Implementation-Follow through discussions	19	10.5	21.1	47.4	10.5	10.5	0	100	2.9
14. Conference Site	38	31.6	26.3	23.7	10.5	7.9	0	100	2.2
15. Opportunities for informal discussions	38	0	5.3	15.8	23.7	50.0	5.3	100	4.3
16. Your own contribution	38	2.6	25.0	48.7	21.1	2.6	0	100	3.0

*Percents and means are based on the number who responded to each item.
** 6 = "one of the best I have attended"; 1 = "very dissatisfied"

Though the mean rating for all change process group discussions (item #4) was 3.4, the mean ratings of the individual sub-groups ranged from 2.5 to 4.3. An even greater disparity occurred for the Monday evening sessions (item #6), for which the sub-group ratings by their own members ranged from 1.7 to 5.5.

The panel discussion on training which was held on Tuesday morning (item #7) provoked many comments, which varied from disapproval to enthusiastic appreciation. Though described by some as stimulating and on target, the panel was felt by others to be lacking in planning and structure and to be unrelated to the outcome goals of the conference. The panel members themselves gave the panel a mean rating of 3.0, slightly lower than the rating of 3.2 which it received from all participants.

Though participants expressed some dissatisfaction with the early activities of the conference, they were quite pleased with their primary task activity, the designing of training programs in task force groups. As with the Monday groups, there was considerable variation in the self-ratings of the different task force efforts by the members of each group. Here we notice an interesting relationship between task force size and satisfaction with the product created. There were four large groups (5 to 7 members) which gave themselves mean ratings which fell between 4.0 and 4.5. Two groups each had two members; one of these rated itself as 5.0 - the highest rating received by any group - and the other gave itself a rating of 3.0. Four participants chose to work alone, and these people gave themselves ratings of only 2.0 or 3.0. This could be explained partly on the basis of modesty of the solo workers. More likely the experience of collaborating in a group is emotionally and intellectually stimulating, with the sharing of diverse ideas yielding a richer and more exciting product. We might also speculate that choosing just one partner with whom to work may be a chancey proposition. The only criticism expressed about the task force groups was that there was insufficient time to do justice to the assignment.

Participants generally liked the products of their own task force group slightly better than they did those of other groups (mean rating of 3.9 for own group as opposed to 3.5 for other groups). It would stand to reason that people would be most enthusiastic about their own areas of interest, but in addition to this the press of time at the end of the conference did not allow for a thorough total-group discussion of the task force products. This discussion (item #12) received a low rating because of this time factor.

The discussion on implementation and follow-through of training designs (item #13) received a similarly low rating, also because of inadequate time.

We were somewhat surprised that participants gave their own contribution (item #16) a mean rating of only 3.0; we would have expected this rating to be very close to that of the task force group ratings. Many people felt they had insufficient time to write and contribute as they would have liked, and one person commented "I gained more than I contributed." But another participant who was very satisfied with his performance stated "I worked hard and I liked it."

Finally, Table III.4 shows that the site of the conference was its least satisfactory aspect, and we received the most numerous and most colorful comments on this item. There was agreement that the food was good and the setting was

pleasant, with its remoteness being judged as an advantage. The accommodations, however, were described by some participants as "spartan" and "primitive."

In order to probe more deeply into participants' feelings about the conference, we asked them to comment on what specific part of the conference they found most meaningful and from which part they learned the most. The comments made in response to these questions are summarized in Table III.5. The percents in this table are based on the number of participants who responded to each question.

TABLE III.5 Conference Activities Which Were Judged The Most Meaningful and The Best Learning Experience
Percent Ratings*

What part of the conference did you find most MEANINGFUL? (35 responses)	Percent	From what part of the conference did you LEARN THE MOST? (34 responses)	Percent
Task Force work	54.3	Task Force work	38.2
Informal contacts	22.9	Monday group sessions	26.5
Monday group sessions	14.3	Informal contacts	17.7
Pre-conference background reading	2.9	Pre-conference background reading	14.7
Group feedback and synthesis sessions	2.9	Group feedback and synthesis sessions	2.9
Training panel	2.9		
TOTAL	100	TOTAL	100

*Percents are based on the number of responses to each question.

We were pleased to find that the task force group work was regarded as being the most meaningful activity as well as providing the greatest opportunity for learning. The high rating of the value of informal contacts illustrates again the fact that the conference participants represented a very unusual gathering of highly qualified experts in interrelated branches of the field of education.

We had hoped to design CECAT in such a way as to make it a model for future gatherings of this type. To find out how well we had succeeded in this aim we asked participants to indicate whether there was anything they would have liked

to have done more of and whether there was anything they would have liked to have done less of. The comments we received in response to these questions are summarized in Table III.6. Here the percents are based on the 41 respondents who handed in the evaluation form.

TABLE III.6 Conference Activities Judged to Have Occupied Too Little or Too Much Time
Percent Ratings*

What would you have liked to have done more of?	Percent	What would you have liked to have done less of?	Percent
More time in task force groups	19.5	Monday group discussions	12.2
Synthesis and total-group discussions	9.8	Random discussions	12.2
Sharper definition of task force assignments	7.3	"Impressing each other"	12.2
Discussion of values issue	4.9	Other	17.1
Informal meetings	4.9	Nothing - conference design was satisfactory	12.2
Work on other conference materials	4.9	No response	34.1
Other	22.0	TOTAL	100
Nothing - conference design was satisfactory	7.3		
No response	19.5		
TOTAL	100		

*Percents are based on all 41 respondents who handed in CECAT EVALUATION forms.

These responses indicate that the conference would have been viewed more satisfactorily if we had begun the task force work sooner, cutting down the time spent in discussing the change process and the participants' own points from all day Monday to only a portion of that day. If we had done this we might also have cut down on the amount of "random discussion" and "impressing each other." Running through the comments which we have grouped under these two headings was the general feeling that a number of people were not getting

down to work and applying themselves to the task of the conference. Perhaps a sharper definition of the task force assignments at an earlier time would also have helped to alleviate this problem.

We were aware, in addition, that not enough time had been set aside at the end of the conference for critique and synthesis of the task force products. This problem was heightened by the fact that a number of people had to leave early to catch their flights for home, but this type of problem is one which should be taken into account in the design of any conference of this size.

The headings "other" in Table III.6 include all the activities which were each mentioned by only one participant as occupying either too much or too little time. They included such things as the desire for more process discussion, interaction with conference principals and interaction with people who were working in other groups; and the desire for less of an "NTL" type approach and of moving around from large to small groups.

D. Post-Conference Action Possibilities

1. *New Ideas for Action*

Though the purpose of CECAT was to help us to arrive at designs for the training of change agents, we felt the conference would have achieved something else of importance as well if it had helped the participants to arrive at new ideas or approaches which they could use in their own work. We asked the participants if this were the case and also whether or not they thought these ideas could be implemented and whether they would make an effort to do so. The responses to these questions are given in Table III.7.

[Insert Table III.7 here]

These responses are certainly most encouraging; the conference evidently yielded a wealth of ideas and, most significantly, participants are apparently eager to follow through on them. In fact a number of people plan to make an effort to utilize their new ideas even though the resources to do so are not available to them at the present time.

The particular nature of the new ideas and approaches which participants derived from the conference are summarized in Table III.8.

[Insert Table III.8 here]

Two task force groups in particular inspired the bulk of ideas related to task force products. About 77% of those who stated that their new ideas were related to task force products mentioned the training programs designed by the groups working on the "macro-system" and the "change-through-crisis" approaches. As well as being a source of ideas for those working in these groups, these two products were the only ones cited by others as being the primary source of their new ideas.

TABLE III.7

Evaluation of Post-Conference Possibilities: New Ideas for Action
Percent Ratings and Mean Ratings*

	Number who responded to this item	Percent Ratings							Mean Ratings**
		6	5	4	3	2	1	Total	
Did the conference help you arrive at any new ideas for action you could take or approaches you could try in your work?	39	Definitely 55.1	19.2	16.7	3.8	2.6	Not Really 2.6	100	5.1
In your opinion would it be possible to implement these ideas under existing conditions?	37	I could implement them 29.7	27.0	18.9	13.5	5.4	Resources not available 5.4	100	4.5
What do you think the chances are that you will actually try to follow through on any of these ideas?	36	Really expect I'll try 55.6	31.9	9.7	2.8	0	Really doubt I'll try 0	100	5.4

*Percents and means are based on the number who responded to each item.

** 6 = "Definitely"; "I could implement them"; "Really expect I'll try."
1 = "Not really"; "Resources not available"; "Really doubt I'll try."

TABLE III.8 Nature of New Ideas and Approaches
Percent Ratings

Nature of New Ideas and Approaches	Percent*
Ideas: Related to task force products: Own task force (33.3%) Other task forces (10.0%)	43.3
Ideas: New insights about the process of change	20.0
Printed Resources: Found out about new materials to use: Havelock materials (6.7%) Materials from other colleagues (6.7%)	13.3
Human Resources: Formed new interpersonal contacts	6.7
Skills Learned: Group interaction techniques; How to set up a task force	6.7
Other	10.0
TOTAL	100

*Percents are based on the 30 participants who responded to this question.

Included in the "other" category of Table III.8 are some interesting by-products of the conference. For example, one participant stated that the conference had emphatically confirmed for him the validity of the approach of the program he is developing in his own work.

2. *Future Conference Possibilities*

Most participants felt the conference should be reconvened at some time within two years; 87.8% were in favor of this idea, while only 7.3% were opposed. The remaining 4.9% gave a conditional response, saying that it should be reconvened only if sufficient work were accomplished in the interim. Some of those who felt the conference should not be reconvened still said that they would come if it were; 92.7% of participants said they would attend if such an event were scheduled. Only 2.4% said they would not attend and again 4.9% said "maybe."

About two thirds of the participants had suggestions as to how such an event should differ from CECAT. Those who specified what the purpose of the conference should be felt that it should deal with implementation of the training designs produced by CECAT. Some people felt that the

nature of the event should depend on its intent; for instance, one participant who was interested in implementing the training design produced by the group working on a "macrosystems" approach felt this end might best be met by scheduling a series of meetings with key personnel in various government and educational agencies rather than holding one large conference.

For the most part, however, participants' suggestions were concerned with how to design a conference similar to CECAT, and these proposals tie in very closely with the evaluation of CECAT activites described above. The suggestion most commonly made was that only those who were truly dedicated to the outcomes of the conference should be invited. Related to this point were recommendations that there should be fewer participants, that these participants should take more of a part in preparing for the conference, and that the conference should be more structured around the goals desired. It was also felt that task force work should be started sooner and that more time should be devoted to total-group discussions in order to provide cross-fertilization of ideas.

All in all, we find that, by the close of CECAT, participants felt very stimulated and highly motivated to work, but they also felt frustrated by the small amount of time available to them to produce what they considered to be quality products. They would like to meet again to follow through on the ideas inspired by CECAT, but they would like to put more effort into pre-conference preparation so that they could get down to the work of the conference as soon as it convened.

We feel certain that on their own many participants will make use of the ideas generated by CECAT, but we also feel frustrated that, outside of holding another conference, we have no device for drawing on the collective talents of the highly motivated and creative CECAT participants who are now scattered around the country. We are not alone in this sentiment: one participant remarked "I would like to be able to tap a group like this for help in meeting our training needs. Perhaps some of the inventiveness possessed by members of the group could be used to invent a process for a productive continuing relationship."

E. Future Need of Conference Related Materials

The first set of questions on our CECAT evaluation form dealt with how useful the participants had found the background readings to be in preparing for this conference. We were also interested as well, however, in finding out how useful the participants felt the conference materials would prove to be in the future in their own work. Our final question asked for this information; the responses are given in Table III.9.

[Insert Table III.9 here]

We were please not only with the very positive response to the "Guide" and to PLANNING FOR INNOVATION, but also with the extremely high interest shown in obtaining copies of the CECAT proceedings. Perhaps this response indicates more clearly than any other that the participants felt the conference had produced valuable results.

TABLE III.9 Evaluation of Future Need for Conference Related Materials Percent Ratings*

	Number Responding to this Item	Not Likely to have a Future Need	Might be Interested at some time	Definitely interested- I have people or events in mind	TOTAL
CECAT Proceedings (including Task Force Plans)	35	2.9	25.7	71.4	100
PLANNING FOR INNOVATION	33	0	48.5	51.5	100
GUIDE TO INNOVATION	33	0	45.5	54.5	100
MANAGING CHANGE (Rogers and Svenning)	29	17.2	41.4	41.4	100
"Doing Research for Change" (part of Watson report)	28	25.0	28.6	46.4	100

*Percents are based on the number who responded to each item.

Section III

APPENDIX A

CECAT Evaluation Form

CECAT EVALUATION

Name: ______________________________

I. Background Readings

	Did not read	Value as background to this type conference: No Opinion	Not Very Useful	Somewhat Useful	Very Useful	Essential	I would consider this a "must" item in the training of change agents
1. PLANNING FOR INNOVATION Summary Chapter (11)							
" " " Roles Chapter (7)							
" " " Other Chapters							
2. GUIDE TO INNOVATION: Introduction							
" " " Case Studies							
" " " "Stages" I-VI							
" " " Appendix on Strategies							
" " " " on Information Sources							
" " " " Change Bibliography							
3. MANAGING CHANGE (Rogers & Svenning)							
4. USING RESEARCH FOR CHANGE (Watson)							
5. THE PLANNING OF CHANGE (Bennis, Benne, and Chin)							
Indicate sections or articles read if any. ______							
______							
______							
______							

6. Do you have any additional reactions or comments on background readings?

7. In designing a training workshop, what reading materials would you take off this list?

8. What other readings would you add?

11. Printed Conference Materials:

A number of handouts were especially prepared for CECAT. Which ones turned out to be useful in facilitating conference work?

	No Opinion	Not Very Useful	Somewhat Useful	Very Useful	Essential
1. List of statements about change process from Chapter 11 (used as basis of Monday's discussions)					
2. List of statements about training (by Chic Jung) (used as basis of Tuesday's A.M. discussions)					
3. Listing of additional points made by participants prior to conference					
4. Letters and other descriptive materials from CECAT					
5. Other (specify): ____ ____ ____ ____					

6. Additional comments on Conference materials:

III. Conference Activities:

How satisfied were you with each of the major elements of the conference? Add comments to each item as you feel necessary.

	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Quite Satisfied	Very Satisfied	One of best I have attended
1. Conference as a whole.						
2. Design of Conference						
3. Orientation: Monday 9 a.m.						
4. Change Process Group Discussion on Monday						
5. Group summaries on Monday (during cocktail hour)						
6. Monday Evening Session (if held)						
7. Tuesday 9 a.m. panel on training						

Conference Activities, continued

	Very Dissatis-fied	Somewhat Dissatis-fied	Somewhat Satisfied	Quite Satisfied	Very Satisfied	One of best I have attended
8. Training Statements Group Discussion on Tuesday						
9. Group Summaries on Tuesday (during cocktails)						
10. Your Task Force and its product						
11. The other Task Force products						
12. Discussion and critique of Task Force products						
13. Implementation and follow-through discussion						

Conference Activities, continued	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Quite Satisfied	Very Satisfied	One of best I have attended
14. Conference Site ____ ____ ____						
15. Opportunities for informal discussions ____ ____ ____						
16. Your own contribution ____ ____ ____						

17. What specific part of the conference did you find most MEANINGFUL? (Please specify kind of activity and content.)

18. What part did you LEARN THE MOST from (kind of activity and content)?

19. Anything you would have like to have done more of:

20. Anything you would have like to have done less of:

IV. Post-Conference Action Possibilities:

1. Did the conference help you arrive at any new ideas for 'ion you could take or approaches you could try in your work?

definitely | | | | | | | not really

Briefly describe any such ideas you did get? (If these ideas are related to Task Force products, indicate which Task Force and how related.)

2. In your opinion, would it be possible to implement these ideas under existing conditions?

I (we) could implement them under existing conditions. | | | | | | | it would take resources, skills or money not available to me (us)

3. What do you think the chances are that you will actually try to follow through on any of the ideas you listed in Question IV-1.

really doubt I'll try | | | | | | | really expect I'll try

4. In your opinion, should this conference be reconvened at some time in the next two years?

Yes ______ No ______

5. Would you participate in such an event if it were held?

Yes ______ No ______

6. In what ways should such an event differ from CECAT? (Please answer on back side.)

V. Future Need of Conference Related Materials

All of the materials provided for CECAT in addition to the CECAT proceedings will be available in quantity for future use in training activities. We would like to have your estimate of possible future use by you or the organization you represent. For non-Michigan products we will relay the information you provide.

	Not likely to have a future need for this.	Might be interested in additional copies at some time.	Definitely interested: I have people and/or events in mind. (Indicate approx. number of copies if possible.)	I will be ready to order as soon as they are available. (Indicate number of copies.)	This is an order. I would like you to send this number of copies.
CECAT Proceedings (including the Task Force Plans and pre-Conference feedback)					
PLANNING FOR INNOVATION ($8.00 per copy)					
GUIDE TO INNOVATION ($3.00 per copy)					
MANAGING CHANGE (Rogers and Svenning - $1.00 per copy from PEP)					
DOING RESEARCH FOR CHANGE (Part of Watson Report which will be available soon)					
Other materials or books which came to your attention during our meetings. (Specify): ______ ______					

Billing Address (if applicable): ______

______

______

BIBLIOGRAPHY

BIBLIOGRAPHY

Bennis, W.G.; Benne, K.D.; and Chin, R. (eds.)
THE PLANNING OF CHANGE, Second Edition, New York: Holt, Rinehart and Winston, 1969.

Clark, David L. and Hopkins, John E.
PRELIMINARY ESTIMATES OF RESEARCH, DEVELOPMENT, AND DIFFUSION PERSONNEL REQUIRED IN EDUCATION 1971-72, Bloomington, Indiana: School of Education, Indiana University, September, 1966.

Clark, David L. and Hopkins, John E.
PROJECT MEMORANDUM #1 - A LOGICAL STRUCTURE FOR VIEWING RESEARCH, DEVELOPMENT AND DIFFUSION ROLES IN EDUCATION, Bloomington, Indiana: Indiana University, CRP Project #X-022, April, 1966.

Glaser, Edward M.
UTILIZATION OF APPLICABLE RESEARCH AND DEMONSTRATION RESULTS, Final Report to Vocational Rehabilitation Administration, Department of Health, Education and Welfare, Project RD-1263-G, March, 1967.

Havelock, Ronald (in collaboration with Alan Guskin) and others
PLANNING FOR INNOVATION, Ann Arbor, Michigan: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, 1969.

Hovland, Carl I.
"Effects of the Mass Media of Communication," in Lindzey, G. (ed.), HANDBOOK OF SOCIAL PSYCHOLOGY READING, Massachusetts: Addison-Wesley, 1954.

Lippitt, Ronald and Fox, Robert
SOCIAL SCIENCE EDUCATION PROJECT, Cooperative Research Project #E-011, U.S. Office of Education, Ann Arbor, Michigan: Institute for Social Research, June, 1964.

Lippitt, Ronald; Watson, Jeanne; and Westley, Bruce
THE DYNAMICS OF PLANNED CHANGE, New York: Harcourt, Brace and Company, Inc., 1958, 312 pp.

Richland, Malcolm
FINAL REPORT: TRAVELING SEMINAR AND CONFERENCE FOR THE IMPLEMENTATION OF EDUCATIONAL INNOVATION, Santa Monica, California: Systems Development Corp., Technical Memorandum Series 2691, 1965, 140 pp.

Rogers, Everett M.
DIFFUSION OF INNOVATIONS, New York: The Free Press of Glencoe, Inc., 1962, 367 pp.

Rogers, Everett M. and Svenning, Lynne
MANAGING CHANGE, Report sponsored by the U.S. Office of Education, Department of Health, Education and Welfare for Operation PEP, Sept., 1969.

Shaevitz, M.; Barr, D.; Feinberg, S.; and Glendon, A.
A TRAINING PROGRAM FOR RESEARCH UTILIZERS: PHILOSOPHY, GOALS, AND METHODS, Research project sponsored by U.S. Office of Education and the Department of Health, Education and Welfare, Ann Arbor, Michigan: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, 1968, 59 pp.

Stufflebeam, Daniel L.
PROPOSAL TO DESIGN NEW PATTERNS FOR TRAINING RESEARCH, DEVELOPMENT, DEMONSTRATION/DISSEMINATION, AND EVALUATION PERSONNEL IN EDUCATION, RFP No. 70-12, Columbus, Ohio: Evaluation Center, The Ohio State University, Sept., 1970.

Watson, Goodwin
USING RESEARCH FOR CHANGE, Part of project under NIMH Contract No. HSM-42-69-1, "Review of Literature on Research Implementation," Los Angeles, California: Human Interaction Research Institute, 1969.

Woods, Thomas E.
THE ADMINISTRATION OF EDUCATIONAL INNOVATION, Eugene, Oregon: Bureau of Educational Research, School of Education, University of Oregon, May, 1967, 61 pp.